

Bulletin  
**Pennsylvania Department of Agriculture**  
Harrisburg, Pa.

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Vol. 18

JUNE 1, 1935

No. 4

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GENERAL BULLETIN, 530  
**FERTILIZER REPORT**  
**1934**



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Published bi-monthly by direction of the Secretary. Entered as second class matter, March 22, 1918, at the Post Office at Harrisburg, Pa., under the Act of June 6, 1900.

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# FERTILIZER REPORT—1934

## INTRODUCTION

The Fertilizer Law, Act of May 1, 1909, as amended, regulates the sale of and defines Commercial Fertilizers as including every substance sold for fertilizing and manurial purposes, except the dung of domestic animals, marl, lime and wood ashes. Registration is required for each calendar year or portion thereof and before being offered for sale for each kind and brand of Commercial Fertilizer and all sacks or attached cards are required to be printed with the following: Net weights, brand or trade names, names and addresses of Manufacturers or Importers and guarantees for the minimum percentage of each of the following constituents: (a) Nitrogen; (b) total phosphoric acid, except in mixed and super phosphate fertilizers; (c) available phosphoric acid; (d) potash soluble in distilled water. All Fertilizers are required to contain not less than 1 per cent. of nitrogen, or 1 per cent. of available phosphoric acid or 1 per cent. of potash and mixed Fertilizers not less than 16 units or 16 per cent., of total plant food, namely, not less than 1 per cent. of nitrogen; 1 per cent. of available phosphoric acid and 1 per cent. of potash. All guarantees for these constituents in the case of mixed Fertilizers must be in even units or percentages, no fractional guarantees being permitted. Any Fertilizer with a brand or trade name including the word "tobacco" is required to contain potash in the form of sulphate of potash.

The number of tons of each kind and brand of Fertilizer sold annually during the preceding year is required to be reported with applications for registration. These tonnage reports should be submitted for all brands, regardless of whether or not certain of them will be discontinued or re-registered, the basis of registration fees for re-registered brands being determined on the amount of tonnage sales reported.

In order that the requirements of the law may become effective and the sale of Fertilizer properly regulated, provision is made for enforcement by authorizing the collection and analysis of official samples, the publication of the results obtained for the information of the public and by making it unlawful for selling agents to sell Fertilizers which fail to meet the guarantees claimed for labeled and registered constituents and for failing to effect registration.

During the Spring and Fall shipping seasons of 1934 the Special Agents collected from selling agencies throughout the Commonwealth 1493 official samples, which, together with reports covering each shipment or lot samples and showing information printed upon sacks or attached cards, including sales conditions, were submitted for examination. Of this number 1478, representing 478 brands, registered by 58 manufacturing and jobbing firms, were analyzed for the forms of plant food constituents which they were guaranteed to contain, representing 6 classes, which, together with the number of brands and samples in each class, were as follows:

	<i>Brands</i>	<i>Samples</i>
Complete Fertilizers .....	335	1034
Ground Bone Fertilizers .....	21	54
Superphosphate Fertilizers .....	61	247

	<i>Brands</i>	<i>Samples</i>
Lime Phosphate Fertilizers .....	10	19
Rock and Potash Fertilizers .....	31	77
Miscellaneous Fertilizers .....	20	47
	<hr/>	<hr/>
Total .....	478	1478

## BRANDS REGISTERED AND TONNAGE SALES

Registration or license fees are required to be paid of from \$15 to \$50 for each kind or brand registered, as follows: \$15 for each new brand and also for each brand re-registered where the tonnage sales during a preceding year did not exceed 150 tons. The remaining fees for re-registered brands, based on tonnage reports, are as follows: 150 to 250 tons, \$20; 250 to 400 tons, \$30; 400 to 500 tons, \$40; and over 500 tons, \$50 for each brand.

The Fertilizer applications for registration received and approved for 1934 sales, for which 159 licenses were issued to 116 manufacturing and importing firms, covered 883 different kinds and brands of Fertilizers. Of the total number of brands 667 were mixed Fertilizers, guaranteed to contain, as required by the law, 16 per cent., or 16 total units of plant food, the remaining brands, including "simple" or "base" materials, supplying either nitrogen, phosphoric acid or potash.

The tonnage reports submitted with 1934 registration applications showed that during the preceding year, 1933, 231,977 tons of Fertilizers were sold (compared with 241,865 tons sold during 1932), the amount of each class being as follows: Complete Fertilizers, 166,931 tons; Ground Bone Fertilizers, 2680 tons; Superphosphate Fertilizers, 47,055 tons; Lime Phosphate Fertilizers, 3476 tons; Ammoniated Phosphate Fertilizers, 29 tons; Rock and Potash Fertilizers, 7181 tons; and Miscellaneous Fertilizers, including the following: Tankage, 1520 tons; Dried Blood, 3 tons; Nitrate of Soda, 437 tons; Potash Salts, 513 tons; Sulphate of Ammonia, 937 tons; and unclassified 1215 tons.

An estimate of the amount of each kind of plant food supplied by the Fertilizers sold during 1933 on the basis of guarantees included in registrations approved, shows that approximately 5019 tons of nitrogen, 25,139 tons of total and available phosphoric acid and 9993 tons of water soluble potash, or a total of 40,141 tons of plant food, were disposed of during the preceding year. These figures show a slight decrease in the amount of total plant food consumed for 1933, in comparison with 42,564 tons estimated for 1932.

## CONCLUSIONS

The Fertilizer Law requires guarantees to be registered and shown on sacks or attached cards for nitrogen, available phosphoric acid and water soluble potash. In the case of mixed Fertilizers it is also required that the guarantees shall be given in even units, and that the plant food guaranteed and contained in mixed Fertilizers shall be not less than 16 total units. Guarantees for total phosphoric acid are not permitted for mixed and Superphosphate Fertilizers, but may be given for untreated materials in lieu of guarantees for available phosphoric acid. Accordingly the Tables, showing the results of chemical analyses accompanying this report, show in the case of Complete Fertilizers, both found and guaranteed nitrogen, available phosphoric acid and

potash; for Ground Bone Fertilizers, found and guaranteed nitrogen and total phosphoric acid; for Superphosphate and Lime Phosphate Fertilizers, found and guaranteed total, available and insoluble phosphoric acid; for Rock and Potash Fertilizers, found and guaranteed available phosphoric acid and potash, and for Miscellaneous Fertilizers, found and guaranteed nitrogen, total, available and insoluble phosphoric acid and potash according to the character of the materials included.

Of the 1478 official samples analyzed, 227, or 15.4 per cent., were deficient in one or more forms of plant food, compared with guarantees, to the extent of .2 per cent. or more, and .1 per cent. or more in the case of guarantees of .50 per cent. or less. This proportion of deficiencies was slightly higher than the 14.7 per cent. variations reported for 1933. Considering the plant food constituents separately, 30 or 2.7 per cent., of the samples were deficient in nitrogen, 3 or .5 per cent., in total phosphoric acid, 77 or 5.6 per cent., in available phosphoric acid and 125, or 11.0 per cent., in potash.

Of the total Fertilizers examined about two thirds of them, or 1034 samples and 335 brands, were Complete Fertilizers, supplying nitrogen, available phosphoric acid and potash, and of this class 203, or 19.6 per cent., failed to meet their guarantees, 26 or 2.5 per cent., being deficient in nitrogen, 70 or 6.8 per cent., deficient in available phosphoric acid and 115 or 11.1 per cent., in potash. There were 1,019 samples of the Complete Fertilizers in which the potash was supplied as muriate, 12 as sulphate and 3 in which both muriate and sulphate of potash were supplied. Only 5 samples included the word "tobacco" as a part of the brand name, the potash being supplied in the sulphate form, as required. The average selling retail value was estimated as \$27.45 a ton compared with \$24.44 for 1933. There were 55 different formula grades of complete Fertilizers supplying from 1 to 10 per cent. nitrogen, from 5 to 24 per cent. available phosphoric acid and from 2 to 14 per cent. potash. The grades which, according to the larger proportion of samples and brands selected for analysis and which were apparently sold in the greater amounts, together with the average selling values, were as follows:

<i>Formula</i>	<i>Brands</i>	<i>Samples</i>	<i>Selling Price</i>
1-10- 5	31	85	\$23.65
2- 8-10	36	131	28.41
2- 9- 5	39	181	24.71
2-10- 4	5	7	26.48
2-10- 6	5	9	28.59
2-12- 2	13	35	25.30
2-12- 4	25	116	26.11
2-12- 6	10	26	28.40
3-12- 6	14	45	29.77
4- 8- 5	9	12	28.55
4- 8- 7	36	160	29.31
4-12- 4	16	45	32.62
4-16- 4	10	23	32.51
5- 8- 5	6	8	29.96
5- 8- 7	5	10	32.21
5-10- 5	11	35	32.42
6- 6- 5	5	11	30.54

There were 4 of the 54 samples of Ground Bone Fertilizers, or 7.4 per cent., which were found to be deficient in plant food compared with guarantees, 1 or 1.9 per cent., being deficient in nitrogen, and 3 or 5.6 per cent., deficient in total phosphoric acid. There was 1 or .4 per cent., of the 247 Superphosphate Fertilizers which were deficient in available phosphoric acid, and of the Lime Phosphate Fertilizers none were deficient. Of the 77 Rock and Potash Fertilizers 16, or 20.8 per cent., failed to meet their guarantees, 6 or 7.8 per cent., being deficient in available phosphoric acid and 10 or 13.0 per cent., in potash. The 47 Miscellaneous Fertilizers included the following: 17 samples of Nitrate of Soda, 11 of Sulphate of Ammonia, 6 of Tankage, 1 of Kainit, 10 of Muriate of Potash and 2 Cyanamid. Of this class 3 or 6.4 per cent., were deficient in nitrogen.

The retail selling prices estimated for the various classes of Fertilizers were higher than those estimated for the 1933 inspection, as will be noted in Table II. The average unit values estimated from the average retail selling prices were as follows: \$1.94 for nitrogen, \$1.01 for available phosphoric acid and \$1.90 for water soluble potash. The retail selling prices, together with averages for each class, will be found in the accompanying Tables.

A review of the Fertilizer Inspection accomplished for 1934 shows that as a rule the fertilizers which were offered for sale were duly registered as required and that while approximately 15.4 per cent. of all the samples show deficiencies, they were not sufficiently serious in the majority of cases, as they were to a large extent balanced by overages and the fertilizers supplied Pennsylvania consumers, based on the shipments examined, as a rule, were correctly guaranteed.

TABLE I—DEFICIENCIES

CLASS OF FERTILIZERS	Samples	Number deficient in		
		Nitrogen	Available Phosphoric Acid	Potash
Complete Fertilizers . . . .	1034	26	70	115
Ground Bone Fertilizers . .	54	1	3*	...
Superphosphate Fertilizers	247	..	1	...
Lime Phosphate Fertilizers	19	..	..	...
Rock and Potash Fertilizers	77	..	6	10
Miscellaneous Fertilizers ..	47	3	..	...
Total . . . . .	1478	30	77	125

\* Total Phosphoric Acid

TABLE II—AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	Complete Fertilizers	Ground Bone Fertilizers	Superphosphate Fertilizers*	Rock and Potash Fertilizers
	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen . . . . .	2.94	3.50	.....	.....
Total Phosphoric Acid . . . .	.....	23.46	.....	.....
Available Phosphoric Acid	10.10	.....	17.76	12.18
Potash . . . . .	6.08	.....	.....	5.55
Selling Price 1934 . . . . .	\$27.45	\$41.39	\$18.02	\$22.87
Selling Price 1933 . . . . .	\$24.44	\$39.75	\$15.90	\$19.50

\* Excluding Lime Phosphates

## KEY TO TABLES

The following tables include the results of chemical analyses of the official samples. Each sample was given a chemist's number and analyzed for nitrogen, total and available phosphoric acid and water soluble potash.

In order to economize a change has been made in the method of preparing tables, showing results of chemical analyses so that instead of the detailed analyses of each sample analyzed, where two or more samples of the same brand were examined and which met the claimed guarantees, the results were averaged. Therefore, the results of analyses shown in the tables will include samples representing single brands, averages of two or more samples of the same brand and the results of separate samples which failed to meet their guarantees. The chemist's numbers, for the samples listed and included in the averages, will be found in parenthesis after the brand names. They are grouped in alphabetical order of manufacturers and brand names with names and addresses of manufacturers or jobbers. The list of the names of selling agents has been discontinued.

The asterisk (\*) indicates the cases where total nitrogen, available phosphoric acid and total potash were deficient to the extent of .2 per cent. or more below their respective guarantees.

Order of results of analyses: Total Nitrogen found and guaranteed; Total Phosphoric Acid found and guaranteed in the case of ground bone, superphosphate and miscellaneous fertilizers; Available Phosphoric Acid found and guaranteed; Insoluble Phosphoric Acid found and guaranteed in the case of superphosphate and miscellaneous fertilizers and Potash as Muriate. In those cases where Potash listed as Muriate is less than the total Potash, the balance is in the form of Sulphate of Potash. Where there is a blank included in the Muriate column instead of figures, all of the Potash is in the form of Sulphate of Potash.

To determine the formula of any brand as guaranteed, use the guarantees for Nitrogen, Available Phosphoric Acid and Total Potash. For example Nitrogen guarantee equals 4%; Available Phosphoric Acid, 8%; Potash 6%. Formula therefore is 4-8-6.

Table III. Complete Fertilizers, furnishing Nitrogen, Available Phosphoric Acid and Potash.

Table IV. Ground Bone Fertilizers, furnishing Nitrogen and Total Phosphoric Acid.

Table V. Superphosphate and Lime Phosphate Fertilizers, furnishing Available Phosphoric Acid.

Table VI. Rock and Potash Fertilizers, furnishing Available Phosphoric Acid and Potash.

Table VII. Miscellaneous Fertilizers, including Nitrate of Soda, Sulphate of Ammonia, Tankage, Kainit, Muriate of Potash, and Cyanamid.

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ACME GUANO CO., Baltimore, Md.							
Acme Ideal Fertilizer 2-9-5 (7983; 9308)	2.22	2.00	9.65	9.00	4.99	6.00	4.99
Acme Royal Compound 2-12-4 (8306; 9309)	2.26	2.00	13.05	12.00	4.48	4.00	4.48
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y.							
AA Acme Fertilizer 1-10-6 (7976; 8107; 8350; 8910; 8992; 9093; 9115; 9176)	1.13 1.05	1.00 1.00	10.23 10.74	10.00 10.00	5.11 *4.42	5.00 6.00	5.11 4.42
AA Acme Fertilizer 1-10-5 (8931)							
AA Champion Fertilizer 2-9-5 (8089; 8108; 8167; 8596; 8753; 8994; 9116)	2.08 2.01	2.00 2.00	9.17 8.99	9.00 9.00	5.12 *4.62	5.00 5.00	5.12 4.62
AA Champion Fertilizer 2-9-5 (8063)							
AA Climax Fertilizer 3-12-6 (8058; 8377; 8419; 8647; 8756; 8926; 8996; 9251)	3.06	3.00	12.16	12.00	6.33	6.00	6.33
AA Farmers Friend Fertilizer 2-12-4 (7982; 7977; 8061; 8081; 8361; 8560; 8596; 8909; 8932; 9013; 9073; 9117)	2.11	2.00	12.27	12.00	4.17	4.00	4.17
AA Gladiator Fertilizer 4-8-7 (8059; 8645; 9118; 9167; 9280; 9318)	4.17	4.00	8.33	8.00	7.16	7.00	7.16
AA Gladiator Fertilizer 4-8-7 (7959)	4.31	4.00	8.16	8.00	*6.46	7.00	6.46
AA Gladiator Fertilizer 4-8-7 (8082)	4.30	4.00	8.39	8.00	*6.78	7.00	6.78
AA Gladiator Fertilizer 4-8-7 (8109)	4.01	4.00	*7.41	8.00	7.08	7.00	7.08
AA Gladiator Fertilizer 4-8-7 (8359)	4.06	4.00	8.00	8.00	*6.52	7.00	6.52
AA Gladiator Fertilizer 4-8-7 (8755)	4.29	4.00	8.09	8.00	*6.68	7.00	6.68
AA Gladiator Fertilizer 4-8-7 (8758)	4.03	4.00	*7.88	8.00	7.23	7.00	7.23
AA Gladiator Fertilizer 4-8-7 (9034)	4.05	4.00	*7.80	8.00	7.09	7.00	7.09
AA Horsehoe Fertilizer 2-12-6 (8946)	2.07	2.00	12.51	12.00	6.32	6.00	6.32
AA Kangaroo Complete Compound 2-10-4 (7985)	2.09	2.00	10.14	10.00	4.36	4.00	4.36
AA Old Hickory Fertilizer 2-8-10 (8141; 8166; 8311; 8422; 8618; 8848; 8926; 8993; 9076)	2.09 2.01	2.00 2.00	8.26 8.20	8.00 8.00	10.18 *9.69	10.00 10.00	10.18 9.69
AA Old Hickory Fertilizer 2-8-10 (8720)							
AA Pathfinder Fertilizer 4-12-4 (8112; 8341; 8378)	4.08	4.00	12.09	12.00	4.13	4.00	4.13
AA Red Dog Fertilizer 2-9-6 (8340; 8668; 8911; 9166; 9224)	2.13	2.00	9.26	9.00	5.12	5.00	5.12
AA Red Dog Fertilizer 2-9-5 (8629)	2.03	2.00	9.79	9.00	*4.51	6.00	4.51
AA Red Dog Fertilizer 2-9-6 (8737)	2.13	2.00	9.71	9.00	*4.76	5.00	4.76
AA Red Seal Fertilizer 6-10-5 (8597; 8646; 8743; 8755; 9282)	5.06	5.00	10.12	10.00	5.09	6.00	5.09
AA Two in One Fertilizer 4-16-4 (8330; 8759; 9038; 9046)	4.07 3.84	4.00 4.00	16.26 *16.69	16.00 16.00	4.25 4.17	4.00 4.00	4.26 4.17
AA Two in One Fertilizer 4-16-4 (8100)							
Agrico for Corn 3-12-6 (7976; 8066; 8078; 8212; 8561)	3.16 3.13	3.00 3.00	12.18 *11.60	12.00 12.00	6.26 6.12	6.00 6.00	6.26 6.12
Agrico for Corn 3-12-6 (8164)	3.06	3.00	11.60	12.00	5.90	6.00	5.90
Agrico for Fruit 9-6-6 (8695)	*9.41	9.00	5.95	6.00	6.26	6.00	6.26
Agrico for Fruit 9-6-6 (8427)	*8.66	9.00	6.60	6.00	6.81	6.00	5.81
Agrico for Grain 2-12-4 (8024; 8064; 8126; 8163; 8213; 8647; 8923; 8986; 8999; 9074; 9246)	2.10	2.00	12.89	12.00	4.20	4.00	4.20
Agrico for Pastures and Top Dressing 7-6-6 (7984; 8028; 8060; 8559)	6.98	7.00	6.43	6.00	5.92	6.00	5.92
Agrico for Pastures and Top Dressing 7-6-6 (8004)	*6.70	7.00	6.68	6.00	5.87	6.00	6.87
Agrico for Pastures and Top Dressing 7-6-6 (8124)	*6.80	7.00	6.01	6.00	6.08	6.00	6.08
Agrico for Potatoes 4-8-7 (7963; 8003; 8027; 8067; 8077; 8366; 8562; 8619)	4.07 4.01	4.00 4.00	8.15 8.60	8.00 8.00	7.12 *6.72	7.00 7.00	7.12 6.72
Agrico for Potatoes 4-14-6 (8563; 8694; 8719)	4.04	4.00	14.14	14.00	6.22	6.00	6.22
Agrico for Truck 5-10-6 (8002; 8056; 8078; 8420; 8754; 8887; 9283)	5.08 5.01	6.00 6.00	10.36 *9.76	10.00 10.00	4.99 5.42	5.00 5.00	4.99 6.42
Agrico for Truck 5-10-6 (8026)	5.14	6.00	*9.67	10.00	5.12	5.00	6.12
Agrico for Truck 5-10-6 (8169)	5.09	6.00	10.13	10.00	*4.74	5.00	4.74
Agrico for Truck 5-10-6 (8648)							
Bowker's Sure Brand Fertilizer 2-9-5 (8356)	2.27	2.00	9.22	9.00	5.41	6.00	6.41
Bowker's Stockbridge Hill and Drill Fertilizer 4-8-7 (8357)	4.29	4.00	8.00	8.00	*6.56	7.00	6.56
Bowker's Sure Crop Fertilizer 1-10-6 (8329)	1.06	1.00	10.99	10.00	6.22	6.00	5.22
Bowker's Sure Crop Fertilizer 1-10-6 (8075)	1.05	1.00	10.26	10.00	*4.68	5.00	4.68
Boss Laurel Fertilizer 2-9-5 (8448; 8988)	2.13	2.00	9.29	9.00	4.99	5.00	4.99
Boss Little Treasure Fertilizer 1-10-6 (8447)	1.09	1.00	10.82	10.00	5.09	5.00	5.09
Boss Peasum Brand Fertilizer 2-8-10 (8449; 8987)	2.26	2.00	8.28	8.00	10.10	10.00	10.10
Lister's Early Bird Fertilizer 4-8-7 (7960)	4.32	4.00	8.19	8.00	*6.60	7.00	6.60
Lister's Harvest Queen Fertilizer 2-9-5 (7961; 8318; 8620; 8816; 9171; 9320)	2.11	2.00	9.34	9.00	5.08	5.00	5.08
Lister's Harvest Queen Fertilizer 2-9-5 (8664)	2.21	2.00	10.06	9.00	*4.55	5.00	4.55
Lister's Sovereign Fertilizer 2-12-4 (7962)	2.14	2.00	*11.74	12.00	4.66	4.00	4.66
Patapasco Big Chief Fertilizer 2-9-5 (8376; 9172)	2.16	2.00	9.41	9.00	4.98	5.00	4.98
Patapasco Coon Brand Fertilizer 1-10-6 (8757; 9246)	1.01	1.00	10.05	10.00	5.05	5.00	6.06

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ARMOUR FERTILIZER WORKS, Baltimore, Md.							
Armour's Big Crop 1-10-5 Fertilizer (8134; 8353; 8957; 9056)	1.23	1.00	10.29	10.00	5.14	5.00	5.14
Armour's Big Crop 1-10-5 Fertilizer (7974)	1.21	1.00	*9.58	10.00	5.75	5.00	5.75
Armour's Big Crop 1-10-5 Fertilizer (8944)	1.27	1.00	10.16	10.00	*4.69	5.00	4.69
Armour's Big Crop 2-8-10 Fertilizer (8373; 8406; 8581; 8697; 9086)	2.10	2.00	8.15	8.00	10.12	10.00	10.12
Armour's Big Crop 2-8-10 Fertilizer (8181)	2.04	2.00	7.82	8.00	*9.63	10.00	9.63
Armour's Big Crop 2-8-10 Fertilizer (8292)	2.05	2.00	9.28	8.00	*8.68	10.00	8.68
Armour's Big Crop 2-8-10 Fertilizer (8453)	2.27	2.00	8.61	8.00	*9.06	10.00	9.06
Armour's Big Crop 2-9-5 Fertilizer (7968; 8034; 8426; 8452; 8557; 8623; 9090; 9267)	2.16	2.00	9.28	9.00	5.06	5.00	5.06
Armour's Big Crop 2-12-2 Fertilizer (8407; 9088)	2.19	2.00	12.31	12.00	2.08	2.00	2.06
Armour's Big Crop 2-12-4 Fertilizer (8247; 8942; 9044; 9268; 9310)	2.15	2.00	12.45	12.00	4.03	4.00	4.03
Armour's Big Crop 2-12-4 Fertilizer (8035)	2.14	2.00	12.11	12.00	*3.71	4.00	3.71
Armour's Big Crop 2-12-4 Fertilizer (8369)	2.23	2.00	*11.73	12.00	4.47	4.00	4.47
Armour's Big Crop 2-12-4 Fertilizer (8730)	2.28	2.00	*11.77	12.00	4.03	4.00	4.03
Armour's Big Crop 2-12-6 Fertilizer (8372)	2.27	2.00	12.02	12.00	6.51	6.00	6.51
Armour's Big Crop 2-12-6 Fertilizer (9057)	2.21	2.00	12.27	12.00	*4.61	6.00	4.51
Armour's Big Crop 2-16-8 Fertilizer (8291)	2.17	2.00	16.18	16.00	*7.66	8.00	7.66
Armour's Big Crop 3-12-6 Fertilizer (8290; 8366; 8450; 9089)	3.12	3.00	12.11	12.00	6.40	6.00	6.40
Armour's Big Crop 4-8-5 Fertilizer (8182)	3.94	4.00	8.11	8.00	4.84	5.00	4.84
Armour's Big Crop 4-8-7 Fertilizer (7967; 8033; 8180; 8209; 8245; 8352; 8403; 8451; 8558; 8622)	3.97	4.00	8.24	8.00	7.19	7.00	7.19
Armour's Big Crop 4-12-4 Fertilizer (8210; 9244)	4.15	4.00	12.37	12.00	4.14	4.00	4.14
Armour's Big Crop 4-12-4 Fertilizer (8243)	4.20	4.00	*11.56	12.00	4.00	4.00	4.00
Armour's Big Crop 4-12-4 Fertilizer (8367)	4.26	4.00	*11.78	12.00	4.31	4.00	4.31
Armour's Big Crop 4-16-4 Fertilizer (8368; 8548; 8728; 9243; 9266)	4.22	4.00	16.15	16.00	4.18	4.00	4.18
Armour's Big Crop 4-16-4 Fertilizer (8031)	4.62	4.00	*14.46	16.00	4.24	4.00	4.24
Armour's Big Crop 5-10-5 Fertilizer (8244; 8405; 8549; 8700; 9287)	5.11	5.00	10.13	10.00	5.29	5.00	5.29
Armour's Big Crop 5-10-5 Fertilizer (8370)	*3.93	5.00	11.34	10.00	*4.76	5.00	4.76
Armour's Big Crop 6-12-7 Fertilizer (8770)	6.04	6.00	*11.37	12.00	7.14	7.00	7.14
Armour's Big Crop 8-16-14 Fertilizer (8371)	*6.75	8.00	*14.08	16.00	*13.44	14.00	13.44
Armour's Big Crop Fertilizer Special 2-9-5 (8151)	2.01	2.00	8.93	9.00	4.94	5.00	4.94
Armour's Special Turf Fertilizer 10-8-6 (8456)	10.03	10.00	8.57	8.00	5.29	6.00	3.20
BALTIMORE FERTILIZER CO., Baltimore, Md.							
Honest 1-10-5 (7873)	1.29	1.00	10.40	10.00	5.12	6.00	5.12
Honest 2-8-10 (7865)	2.76	2.00	8.29	8.00	9.92	10.00	9.92
Honest 2-9-5 (7872; 8783)	2.30	2.00	9.80	9.00	4.94	5.00	4.95
Honest 4-8-7 (7870)	4.02	4.00	8.05	8.00	8.15	7.00	8.15
Old Bonesty 1-12-3 (8784)	1.31	1.00	12.58	12.00	3.51	3.00	3.51
Old Bonesty 1-12-3 (7871)	1.34	1.00	*11.30	12.00	3.67	3.00	3.67
BAUGH & SONS COMPANY, Baltimore, Md.							
Baugh's Advanced Growers Special 5-8-7 (8120)	4.92	5.00	8.01	8.00	7.31	7.00	7.31
Baugh's Balanced Plant Food 4-12-4 (8118; 8885; 9318)	4.36	4.00	12.45	12.00	4.57	4.00	4.57
Baugh's Commercial Crop Compound 2-B-10 (8091; 8297; 8509; 8525; 8550; 8887; 9048; 9143; 9238)	2.22	2.00	8.47	8.00	10.09	10.00	10.09
Baugh's Complete Animal Base Fertilizer 2-9-5 (7992; 8094; 8121; 8298; 8384; 8507; 8817; 8866; 8884; 8928; 9007; 9049; 9068; 9225; 9303)	2.16	2.00	9.31	9.00	5.30	5.00	5.30
Baugh's Double Eagle Phosphate 2-12-4 (8231; 8260; 8524; 8818; 8892; 8930; 9014; 9067)	2.20	2.00	12.39	12.00	4.25	4.00	4.25
Baugh's Excelsior Mixture 1-10-5 (7991; 8044; 8185; 8527; 8552; 8816; 8929; 8959; 9110)	1.21	1.00	10.30	10.00	5.29	5.00	5.29
Baugh's Half and Half Mixture 1-10-5 (9141)	1.29	1.00	10.00	10.00	5.47	5.00	5.47
Baugh's Half Century Perfection Brand 4-8-7 (7953; 7993; 8043; 8090; 8119; 8234; 8251; 8398; 8506; 8523; 8551; 8890; 9182)	4.11	4.00	8.25	8.00	7.15	7.00	7.15
Baugh's Original Potato Guano 6-6-5 (9142)	*5.43	6.00	7.26	6.00	5.20	5.00	5.20
Baugh's Peruvian Guano Substitute 4-B-5 (8117)	4.14	4.00	8.12	8.00	5.25	5.00	5.25
* Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
Baugh's Potato and Truck Special 4-8-6 (8259)	4.03	4.00	9.05	8.00	6.02	6.00	6.02
Baugh's The Old Standby 2-12-2 (8042; 8092; 8115; 8336; 8526; 8891; 9015; 9169)	2.11	2.00	12.23	12.00	2.65	2.00	2.65
Baugh's Three-Quarter Century Perfection Brand 3-12-6 (7990; 8261; 8886)	3.25	3.00	12.24	12.00	6.46	6.00	6.46
Baugh's Truckers Favorite 5-10-5 (8233; 8337)	5.30	5.00	10.11	10.00	5.06	5.00	5.06
Baugh's Wheat Fertilizer 2-12-6 (8865; 8889; 9047; 9160; 9237)	2.26	2.00	12.31	12.00	6.35	6.00	6.35
W. S. CAPLES & SON, Johnstown, Pa.							
Cambria Lion Phosphate 4-10-5 (8493)	4.04	4.00	11.03	10.00	5.00	5.00	5.00
Cambria Potato and Truck 2-10-6 (8492)	*1.48	2.00	10.47	10.00	6.23	6.00	6.23
Cambria Standard 2-10-4 (8491; 9158)	1.99	2.00	11.03	10.00	5.32	4.00	5.32
CARLISLE FERTILIZER WORKS, Carlisle, Pa.							
Carlisle 1-10-5 (7862)	1.18	1.00	10.29	10.00	5.62	5.00	5.62
Carlisle 2-9-5 (7861)	2.62	2.00	9.57	9.00	5.26	5.00	5.26
Carlisle 4-8-7 (7863)	4.69	4.00	8.31	8.00	7.13	7.00	7.13
CENTRAL CHEMICAL CO., Baltimore, Md.							
Gipe's 2-8-10 (7950; 9194)	2.05	2.00	8.35	8.00	10.21	10.00	10.21
Gipe's 2-9-5 (9193)	2.23	2.00	9.69	9.00	5.27	5.00	5.27
Gipe's 2-9-5 (7948)	2.25	2.00	9.09	9.00	*4.64	5.00	4.64
Gipe's 2-12-6 (9191)	2.44	2.00	12.26	12.00	6.93	6.00	6.93
Gipe's 2-12-6 (7947)	2.23	2.00	12.30	12.00	*5.71	6.00	5.71
Gipe's 4-8-7 (9192)	4.02	4.00	8.85	8.00	6.89	7.00	6.89
Gipe's 4-8-7 (7949)	*3.20	4.00	8.46	8.00	8.24	7.00	8.24
Gro-All Crown Jewel 1-10-5 (7944; 8332; 8850; 8900; 9197)	1.27	1.00	10.55	10.00	5.33	5.00	5.33
Gro-All Excelsior 2-9-5 (8011; 8106; 8479; 8602; 8710; 8786; 8849; 8903; 9051; 9196; 9279)	2.21	2.00	9.39	9.00	5.44	5.00	5.44
Gro-All Excelsior 2-9-5 (9022)	2.30	2.00	*8.70	9.00	4.96	5.00	4.96
Gro-All Golden Sheaf 3-12-6 (8144; 9200)	3.24	3.00	12.01	12.00	6.17	6.00	6.17
Gro-All Golden Sheaf 3-12-6 (8605)	3.03	3.00	*11.66	12.00	6.52	6.00	6.52
Gro-All Grain and Grass Grower 2-12-2 (8607; 8712; 8801)	2.22	2.00	12.05	12.00	2.49	2.00	2.49
Gro-All Grain Food 2-12-4 (8012; 8103; 8582; 8606; 8714; 8852; 8904; 9000; 9020; 9062; 9199; 9273)	2.22	2.00	12.29	12.00	4.44	4.00	4.44
Gro-All Imperial 2-8-10 (8334; 8567; 8851; 8905; 9050)	2.10	2.00	8.56	8.00	10.14	10.00	10.14
Gro-All Imperial 2-8-10 (9139)	2.50	2.00	8.35	8.00	*7.86	10.00	7.86
Gro-All Potato Eclipse 4-8-10 (8566)	4.09	4.00	10.17	8.00	9.81	10.00	9.81
Gro-All Potato Eclipse 4-8-10 (8512)	4.21	4.00	9.97	8.00	*9.64	10.00	9.64
Gro-All Potato Special 4-8-7 (8010; 8052; 8105; 8331; 8603)	4.33	4.00	8.42	8.00	7.08	7.00	7.08
Gro-All Potato Special 4-8-7 (8713)	4.02	4.00	8.97	8.00	*6.68	7.00	6.68
Gro-All Potato Special 4-8-7 (8902)	4.12	4.00	8.61	8.00	*6.71	7.00	6.71
Gro-All Super Fish 2-12-6 (8711; 9059; 9201)	2.17	2.00	12.27	12.00	6.25	6.00	6.25
Gro-All Super Fish 2-12-6 (8899)	2.30	2.00	12.58	12.00	*5.36	6.00	5.36
Gro-All Super Special 4-16-4 (8071)	3.98	4.00	16.74	16.00	*3.62	4.00	3.62
Gro-All Top Dresser 6-6-5 (8013)	6.13	6.00	6.31	6.00	4.90	5.00	4.90
Gro-All Top Dresser 6-6-5 (7946)	*5.73	6.00	6.96	6.00	5.51	5.00	5.51
Gro-All 4-12-4 (8601)	4.05	4.00	12.39	12.00	4.21	4.00	4.21
Gro-All 4-12-4 (9140)	*3.73	4.00	*11.45	12.00	4.50	4.00	4.50
Gro-All 5-10-5 (8050)	5.12	5.00	10.12	10.00	5.00	5.00	5.00
COOPERATIVE G.L.F. MILLS INC., Buffalo, N. Y.							
G.L.F. Quality Closed Formula Fertilizers 2-8-10 (8147; 8153; 8220)	2.35	2.00	8.34	8.00	10.63	10.00	10.63
G.L.F. Quality Closed Formula Fertilizers 2-12-4 (8221; 8591; 8750)	2.23	2.00	12.41	12.00	4.55	4.00	4.55
G.L.F. Quality Closed Formula Fertilizers 2-12-4 (8154)	2.16	2.00	*11.73	12.00	5.90	4.00	5.90
G.L.F. Quality Open Formula Fertilizers 3-12-6 (8590)	3.62	3.00	12.40	12.00	6.91	6.00	6.91
G.L.F. Quality Open Formula Fertilizers 4-8-5 (8149)	4.14	4.00	8.29	8.00	5.45	5.00	5.45
G.L.F. Quality Open Formula Fertilizers 4-8-7 (Acid) (8216)	4.41	4.00	9.66	8.00	*6.47	7.00	6.47
G.L.F. Quality Open Formula Fertilizers 4-8-7 (Non-Acid) (8156; 8578; 8588)	4.20	4.00	8.53	8.00	7.49	7.00	7.49
G.L.F. Quality Open Formula Fertilizers 4-8-7 (Non-Acid) (8592)	4.61	4.00	8.52	8.00	*6.62	7.00	6.62
G.L.F. Quality Open Formula Fertilizers 4-12-4 (8157; 8576)	4.16	4.00	12.62	12.00	5.67	4.00	5.67
G.L.F. Quality Open Formula Fertilizers 4-12-4 (8218)	5.01	4.00	11.88	12.00	*3.77	4.00	3.77
G.L.F. Quality Open Formula Fertilizers 4-16-4 (8217)	4.03	4.00	16.00	16.00	4.88	4.00	4.88
G.L.F. Quality Open Formula Fertilizers 5-8-7 (8577)	5.13	5.00	8.26	8.00	8.26	7.00	8.26
G.L.F. Quality Open Formula Fertilizers 5-10-5 (8593; 8961)	5.54	5.00	10.13	10.00	5.09	5.00	5.09
G.L.F. Quality Open Formula Fertilizers 5-10-5 (8148)	*4.51	5.00	*9.16	10.00	5.21	5.00	5.21
G.L.F. Quality Open Formula Fertilizers Vegetable Special 5-10-5 (8579)	5.02	5.00	10.04	10.00	6.30	5.00	6.30
JACOB DOLD PACKING CO., Buffalo, N. Y.							
Dold Quality Special 5-12-6 Fertilizer (8113)	5.48	5.00	12.22	12.00	8.29	6.00	8.29
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
EASTERN STATES FARMERS EXCHANGE, Springfield, Mass. Eastern States 2-8-10 (8390)	2.65	2.00	8.62	8.00	11.88	10.00	11.98
AMOS EBY & CO., Leaven Place, Pe. Eby Challenge 4-8-5 (7917)	4.20	4.00	8.02	8.00	5.91	5.00	5.91
Eby Grass Special 7-6-5 (7919)	7.08	7.00	6.59	6.00	5.63	5.00	5.63
Eby Pequee Ammoniated 1-10-5 (7915)	1.12	1.00	*9.13	10.00	6.08	5.00	6.08
Eby Pequee Economy 2-10-4 (7916)	2.00	2.00	*9.35	10.00	4.47	4.00	4.47
Eby Pequee High Grade 5-6-5 (7918)	5.01	5.00	6.10	6.00	6.04	5.00	6.04
Eby Pequee Special Potato 3-8-7 (7920)	3.07	3.00	8.47	8.00	8.14	7.00	8.14
Eby Pequee Valley 2-8-10 (7923)	2.11	2.00	7.93	8.00	9.87	10.00	9.87
THE ERIE REDUCTION CO., Erie, Pa. General Crop Special (8672)	2.21	2.00	*11.30	12.00	2.38	2.00	2.38
Erie Plant Food (8671)	4.02	4.00	12.15	12.00	4.40	4.00	4.40
Erie Poteto Special (8669)	2.01	2.00	*7.47	8.00	10.85	10.00	10.85
Erie Truck Special (8670)	3.88	4.00	*7.39	8.00	*6.71	7.00	6.71
FARMERS FERTILIZER & FEED CO., Westminster, Md. Hi-Grade 2-9-5 (7988)	2.44	2.00	9.24	9.00	5.05	5.00	5.05
FARMERS FERTILIZER WORKS, Elizabethtown, Pa. Donegal Plant Food 5-8-6 (7889)	5.34	5.00	9.77	8.00	6.26	6.00	6.26
Farmers Beet Yet 2-8-10 (7892; 8822; 9240)	2.20	2.00	8.56	8.00	10.21	10.00	10.21
Farmers Club 3-8-5 (7895; 8826)	2.94	3.00	9.68	8.00	5.72	5.00	5.72
Farmers Gilt Edge Poteto and Truck 4-8-7 (7896)	4.33	4.00	9.39	8.00	7.84	7.00	7.84
Farmers Gilt Edge Poteto and Truck 4-8-7 (8828)	*3.66	4.00	8.13	8.00	7.48	7.00	7.48
Farmers I.X.L. 2-12-4 (8825)	2.11	2.00	12.48	12.00	5.03	4.00	5.03
Farmers Tobacco Special 5-5-6 (7888)	5.02	5.00	5.63	5.00	7.66	6.00	---
Farmers 1-10-5 (7891; 8821; 8939)	1.15	1.00	10.79	10.00	5.44	5.00	5.44
Farmers 2-9-5 (8824)	2.11	2.00	9.76	9.00	5.06	5.00	5.06
Farmers 3-12-5 (7890; 8820)	3.22	3.00	12.36	12.00	5.51	5.00	5.51
JOSEPH R. GAWTHROP, Kennett Square, Pa. Champion Fertilizer 1-13-2 (9312)	1.01	1.00	*12.25	13.00	2.42	2.00	2.42
2-10-6 Fertilizer (9311)	1.93	2.00	10.20	10.00	*4.62	6.00	4.62
GRIFFITH & BOYD CO., Baltimore, Md. Fish and Potesh Guano 2-11-3 (8542; 8872)	2.08	2.00	11.06	11.00	3.21	3.00	3.21
Fish, Blood and Potesh 1-12-3 (8656; 8701; 9008; 9289; 9298)	1.22	1.00	12.38	12.00	3.20	3.00	3.20
Gilt Edge Crop Guano 2-8-10 (8635)	2.11	2.00	8.55	8.00	9.87	10.00	9.87
Gilt Edge Crop Guano 2-8-10 (8658)	2.07	2.00	8.94	8.00	*9.49	10.00	9.49
Gilt Edge Crop Guano 2-8-10 (8882)	2.22	2.00	8.16	8.00	*8.32	10.00	8.32
Gilt Edge Crop Guano 2-8-10 (8290)	2.21	2.00	8.01	8.00	*9.78	10.00	9.76
High Grade Truck Guano 4-8-7 (7958; 7981; 8205; 8762; 8873; 8883)	4.10	4.00	8.34	8.00	7.29	7.00	7.29
High Grade Truck Guano 4-8-7 (8540)	*3.73	4.00	8.50	8.00	7.29	7.00	7.29
Nitro Crop Feeder 8-6-2 (8659)	*7.66	8.00	6.63	6.00	2.84	2.00	2.84
Peerless Fertilizer 1-10-5 (7980; 8541; 8871; 8936)	1.21	1.00	10.35	10.00	5.16	5.00	5.16
Reliable Crop Grower 2-12-4 (8279; 9010)	2.18	2.00	12.55	12.00	4.76	4.00	4.76
Special Guano 2-9-5 (7957; 8702; 8760; 8881; 8937; 9151; 9250)	2.23	2.00	9.32	9.00	5.26	5.00	5.26
Special Poteto Fertilizer 3-8-7 (8278)	3.37	3.00	8.40	8.00	7.01	7.00	7.01
THE HUBBARD FERTILIZER CO., Baltimore, Md. Hubbard's Complete Fertilizer 2-12-2 (8182; 9035)	2.13	2.00	11.94	12.00	2.37	2.00	2.37
Hubbard's Complete Fertilizer 2-12-2 (8768)	2.66	2.00	*10.66	12.00	4.19	2.00	4.19
Hubbard's Complete Fertilizer 2-12-2 (9256)	2.16	2.00	*11.64	12.00	3.55	2.00	3.55
Hubbard's Jersey Truck 2-8-10 (8430; 8477; 8539; 8610; 8652; 9291)	2.18	2.00	8.46	8.00	10.29	10.00	10.29
Hubbard's Jersey Truck 2-8-10 (8197)	1.83	2.00	8.16	8.00	*9.31	10.00	9.31
Hubbard's Jersey Truck 2-8-10 (8676)	4.22	2.00	9.15	8.00	*6.05	10.00	6.05
Hubbard's Jersey Truck 2-8-10 (8765)	2.02	2.00	8.75	8.00	*7.65	10.00	7.65
Hubbard's Jersey Truck 2-8-10 (9029)	2.01	2.00	8.09	8.00	*9.69	10.00	9.69
Hubbard's Poteto Fertilizer 4-8-7 (7955; 8039; 8476; 8537; 8617; 8653; 8767; 9189)	4.27	4.00	8.44	8.00	7.17	7.00	7.17
Hubbard's Poteto Fertilizer 4-8-7 (8198)	4.45	4.00	8.10	8.00	*6.44	7.00	6.44
Hubbard's Poteto Fertilizer 4-8-7 (8428)	*2.78	4.00	8.53	8.00	8.28	7.00	8.28
Hubbard's Poteto Fertilizer 4-8-7 (8680)	4.29	4.00	*7.70	8.00	7.00	7.00	7.00
Hubbard's Special Brand Fertilizer 4-12-4 (8655; 8769; 9148; 9181)	4.15	4.00	12.36	12.00	4.24	4.00	4.24
Hubbard's Special Brand Fertilizer 4-12-4 (8193)	3.90	4.00	*11.80	12.00	4.38	4.00	4.38
Hubbard's 1-10-5 Fertilizer (8040)	1.46	1.00	10.01	10.00	5.47	5.00	5.47
Hubbard's 2-9-5 Fertilizer (8038; 8429; 8516; 8677; 8763; 9036; 9107; 9255)	2.23	2.00	9.39	9.00	5.66	5.00	5.66
Hubbard's 2-12-4 Fertilizer (9028; 9147; 9292)	2.18	2.00	12.51	12.00	4.26	4.00	4.26
Hubbard's 2-12-6 Fertilizer (9037)	2.29	2.00	12.20	12.00	6.07	6.00	6.07
Hubbard's 3-8-5 Fertilizer (7954)	3.16	3.00	8.25	8.00	5.14	5.00	5.14
Hubbard's 3-8-10 Fertilizer (7956)	2.88	3.00	8.56	8.00	*9.30	10.00	9.30
Hubbard's 3-8-10 Fertilizer (8402)	3.01	3.00	8.73	8.00	*9.10	10.00	9.10
Hubbard's 3-12-6 Fertilizer (8431)	3.02	3.00	12.20	12.00	6.54	6.00	6.54
Hubbard's 4-8-4 Fertilizer (8681)	4.06	4.00	8.83	8.00	4.01	4.00	4.01
Hubbard's 5-10-5 Fertilizer (9137)	*4.78	5.00	11.19	10.00	5.76	5.00	5.76
INDEPENDENT MANUFACTURING CO., Philadelphia, Pa. *Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Independent's Standard Special Wheat Fertilizer 2-12-5 (9102)	2.65	2.00	12.62	12.00	*4.44	5.00	4.44
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N.Y.							
International Early Harvest 3-12-6 (8691)	3.27	3.00	12.69	12.00	6.16	6.00	6.16
International Economy 4-16-4 (8689)	4.01	4.00	16.39	16.00	*3.63	4.00	3.63
International Garden Truck 4-8-7 (8324; 8683; 9129)	4.06	4.00	8.13	8.00	7.14	7.00	7.14
International Ideal 2-9-5 (8122; 8322; 9127)	2.12	2.00	9.04	9.00	5.06	5.00	5.06
International Superior 4-12-4 (8960)	*3.63	4.00	12.07	12.00	4.03	4.00	4.03
International Supreme 2-8-10 (8690; 9130)	2.24	2.00	8.14	8.00	10.51	10.00	10.51
International 5-8-8 (8693)	6.10	5.00	7.89	8.00	*7.36	8.00	7.36
International 7-8-6 (8692)	6.83	7.00	6.17	6.00	*5.67	6.00	5.67
KEYSTONE GRANGE EXCHANGE, Harrisburg, Pa.							
Granger's 2-12-4 Fertilizer (8347)	2.28	2.00	12.02	12.00	4.09	4.00	4.09
Granger's 4-8-7 Fertilizer (8238; 8348)	4.05	4.00	8.47	8.00	7.30	7.00	7.30
THE KLINE GRAIN CO., Shelocta, Pa.							
Kline's Potato and Truck Fertilizer (8732)	4.26	4.00	10.68	8.00	7.07	7.00	7.07
KOLLER FERTILIZER CO., Glen Rock, Pa.							
Koller's Ammoniated Phosphate 1-10-5 (7860; 8808)	1.60	1.00	10.00	10.00	5.32	5.00	5.32
Koller's Corn Special Phosphate 2-12-4 (7857; 8395)	2.21	2.00	12.44	12.00	4.09	4.00	4.09
Koller's Keystone Potato Fertilizer 4-8-7 (7853)	4.13	4.00	9.59	8.00	7.95	7.00	7.95
Koller's Keystone Potato Fertilizer 4-8-7 (8394)	3.90	4.00	8.58	8.00	*6.47	7.00	6.47
Koller's Lion Brand Fertilizer 2-10-6 (8396)	2.01	2.00	9.96	10.00	6.00	6.00	6.00
Koller's Lion Brand Fertilizer 2-10-6 (8811)	2.59	2.00	*9.59	10.00	6.67	6.00	6.67
Koller's Potato Grower Phosphate 1-8-8 (7858)	1.00	1.00	9.38	8.00	*7.75	8.00	7.75
Koller's Producer Phosphate 2-8-10 (7856)	2.01	2.00	8.83	8.00	10.21	10.00	10.21
Koller's Super Ammoniated Phosphate 2-9-6 (7859; 8809)	2.20	2.00	9.21	9.00	5.20	5.00	5.20
Koller's Super Ammoniated Phosphate 2-9-6 (8392)	2.17	2.00	*8.69	9.00	5.22	5.00	5.22
Koller's Truck and Garden Phosphate 3-8-5 (7856)	*2.30	3.00	9.03	8.00	5.39	5.00	6.39
LANCASTER BONE FERTILIZER CO., INC., Quarryville, Pa.							
Conestoga Brand Harvest Queen 2-9-5 (7908; 8386; 8842; 9300)	2.08	2.00	9.37	9.00	5.16	5.00	5.16
Conestoga Brand Lancaster Peerless 2-12-4 (7909; 8387; 8841; 9302)	2.17	2.00	12.50	12.00	3.97	4.00	3.97
Conestoga Brand Tobacco Special 4-5-8 (8840)	4.03	4.00	4.95	5.00	8.10	8.00	----
Conestoga Brand Truckers Special 4-8-7 (8388)	4.29	4.00	8.10	8.00	7.31	7.00	7.31
Conestoga Brand Truckers Special 4-8-7 (7912)	4.15	4.00	*7.53	8.00	8.00	7.00	8.00
Conestoga Brand 2-8-10 (8389; 8843; 9301)	2.03	2.00	8.15	8.00	10.28	10.00	10.28
Conestoga Brand 2-8-10 (7913)	2.17	2.00	8.31	8.00	*9.77	10.00	9.77
Conestoga Brand 2-8-10 (9305)	1.90	2.00	8.15	8.00	*9.45	10.00	9.45
Conestoga Brand 3-12-5 (7911)	3.08	3.00	12.10	12.00	5.08	5.00	5.08
Conestoga Brand 3-12-5 (8846)	3.12	3.00	12.42	12.00	*4.68	5.00	4.68
LEBANON FERTILIZER WORKS, Lebanon, Pa.							
Levan's 1-10-6 (7927)	1.08	1.00	*9.56	10.00	4.91	5.00	4.91
Levan's 2-8-10 (7926; 9218)	2.14	2.00	8.19	8.00	10.41	10.00	10.41
Levan's 2-9-5 (7924)	2.01	2.00	9.18	9.00	5.01	5.00	5.01
Levan's 2-12-6 (7929; 9219)	2.14	2.00	12.12	12.00	6.39	6.00	6.39
Levan's 2-12-6 (8894)	2.13	2.00	*11.80	12.00	6.31	6.00	6.31
Levan's 3-12-6 (7928; 9222)	3.23	3.00	11.97	12.00	6.37	6.00	6.37
Levan's 4-8-7 (7937; 9220)	4.26	4.00	8.06	8.00	7.30	7.00	7.30
Levan's 4-16-4 (7934)	4.07	4.00	16.11	16.00	4.26	4.00	4.26
Levan's 4-16-10 (7933)	4.29	4.00	*15.60	16.00	10.10	10.00	10.10
FRED E. LORD, Epsy, Pa.							
Lord's 2-10 Fertilizer (8136; 8914)	2.09	2.00	8.56	8.00	10.96	10.00	10.96
Lord's 2-10-4 Fertilizer (8137; 8912)	2.34	2.00	10.70	10.00	4.30	4.00	4.30
Lord's 4-8-8 Fertilizer (8915)	4.25	4.00	8.58	8.00	8.18	8.00	8.18
Lord's 5-10-6 Fertilizer (8916)	5.27	5.00	10.96	10.00	5.04	5.00	5.04
FREDERICK MEHRING FERTILIZER WORKS, Keymar, Md.							
Mehring's Big 4 1-10-6 (7996)	1.25	1.00	10.55	10.00	6.05	6.00	5.06
Mehring's Early Truck Guano 4-8-7 (7998)	4.31	4.00	8.77	8.00	7.88	7.00	7.88
Mehring's Mammoth Truck Grower 2-9-6 (7997)	2.42	2.00	9.04	9.00	5.08	5.00	5.08
THE MILLER FERTILIZER CO., Baltimore, Md.							
Miller 1-10-5 Fertilizer (8468; 8530; 8857; 8906; 9173; 9210)	1.25	1.00	10.34	10.00	6.19	5.00	5.19
Miller 1-10-5 Fertilizer (8021)	1.72	1.00	*9.71	10.00	5.16	5.00	5.16
Miller 2-8-10 Fertilizer (7887; 8947; 9208; 9242; 9276)	2.11	2.00	8.33	8.00	10.40	10.00	10.40
* Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
Miller 2-8-10 Fertilizer (8535)	P. ct. 2.04	P. ct. 2.00	P. ct. 8.39	P. ct. 8.00	P. ct. *9.67	P. ct. 10.00	P. ct. 9.67
Miller 2-8-10 Fertilizer (8515)	2.28	2.00	9.42	8.00	*5.69	10.00	5.69
Miller 2-8-10 Fertilizer (8853)	2.24	2.00	8.06	8.00	*9.71	10.00	9.71
Miller 2-9-5 Fertilizer (7884; 8270; 8467; 8516; 8533; 8855; 9133; 9178; 9203)	2.21	2.00	9.37	9.00	5.21	5.00	5.21
Miller 2-12-2 Fertilizer (8613; 9211)	2.25	2.00	12.48	12.00	2.51	2.00	2.51
Miller 2-12-4 Fertilizer (8517; 8534; 8856; 8907; 9065; 9179; 9202; 9317)	2.20	2.00	12.57	12.00	4.26	4.00	4.26
Miller 2-12-4 Fertilizer (9134)	2.18	2.00	*11.74	12.00	4.48	4.00	4.48
Miller 2-12-6 Fertilizer (7939; 8908; 9206; 9241)	2.25	2.00	12.34	12.00	6.54	6.00	6.54
Miller 3-12-6 Fertilizer (7885; 7938; 9209)	3.14	3.00	11.97	12.00	6.01	6.00	6.01
Miller 4-8-5 Fertilizer (8531)	4.23	4.00	8.98	8.00	4.86	5.00	4.86
Miller 4-8-7 Fertilizer (7940; 8271; 8382; 8532; 8746)	4.21	4.00	8.51	8.00	7.10	7.00	7.10
Miller 4-8-7 Fertilizer (7883)	4.02	4.00	8.80	8.00	*6.47	7.00	6.47
Miller 4-8-7 Fertilizer (9207)	3.88	4.00	9.06	8.00	*6.54	7.00	6.54
Miller 4-12-4 Fertilizer (8020; 9277)	4.01	4.00	12.24	12.00	4.58	4.00	4.58
Miller 4-12-4 Fertilizer (8764)	*3.05	4.00	*11.44	12.00	5.58	4.00	5.58
Miller 5-8-5 Fertilizer (8614)	*4.04	5.00	11.98	8.00	8.93	5.00	8.93
Miller 2-10-6 Fish (8442; 9212; 9316)	2.24	2.00	10.51	10.00	6.30	6.00	6.30
G. OBER & SONS CO., Baltimore, Md.							
Ober's Avondale Mixture 3-12-6 (7900)	*2.77	3.00	12.14	12.00	5.84	6.00	5.84
Ober's Avondale Mixture 3-12-6 (8832)	3.45	3.00	*11.67	12.00	6.27	6.00	6.27
Blue Ribbon Tobacco Fertilizer 3-5-12 (7904)	3.10	3.00	4.84	5.00	12.14	12.00	-----
Fruit and Vine Truck Guano 4-8-5 (7903; 8838)	4.09	4.00	8.22	8.00	5.18	5.00	5.18
Lawn and Garden Fertilizer 6-6-5 (8575)	6.75	6.00	*5.49	6.00	4.91	5.00	4.91
Red Jacket Fertilizer 4-16-4 (7907)	4.39	4.00	*15.26	16.00	5.36	4.00	5.36
Red Seal Corn and Wheat Guano 2-12-4 (8836)	2.19	2.00	12.06	12.00	4.46	4.00	4.46
Special Plant Food 2-9-5 (7906; 8839)	2.17	2.00	*9.49	9.00	5.21	5.00	5.21
Stag Guano 1-10-5 (8831)	1.21	1.00	*9.67	10.00	5.56	5.00	5.56
Sunbeam Guano 4-8-7 (7902)	4.16	4.00	8.32	8.00	7.42	7.00	7.42
Sunbeam Guano 4-8-7 (8837)	4.02	4.00	8.50	8.00	*6.78	7.00	6.78
Superior Potato and Vegetable Grower 2-8-10 (7898)	2.03	2.00	8.45	8.00	10.36	10.00	10.36
Superior Potato and Vegetable Grower 2-8-10 (8055)	2.22	2.00	8.44	8.00	*9.72	10.00	9.72
Superior Potato and Vegetable Grower 2-8-10 (8830)	2.45	2.00	7.94	8.00	*9.65	10.00	9.65
PIEDMONT MT. AIRY GUANO CO., INC., Baltimore, Md.							
Piedmont 1-10-5 Fertilizer (8489)	1.26	1.00	10.47	10.00	5.45	5.00	5.45
Piedmont 2-9-5 Fertilizer (8488)	2.27	2.00	9.19	9.00	5.00	5.00	5.00
RASIN MONUMENTAL CO., Baltimore, Md.							
Rasin's High Grade Truck Compound 4-8-7 (8138; 8446; 8634; 8739)	3.97	4.00	8.47	8.00	7.04	7.00	7.04
Rasin's High Grade Truck Compound 4-8-7 (9221)	3.82	4.00	8.48	8.00	*6.02	7.00	6.02
Rasin's National Crop Compound 1-10-5 (8734)	1.20	1.00	10.14	10.00	5.25	5.00	5.25
Rasin's Royal Fish and Potash Mixture 2-9-5 (8139; 8399; 9101; 9126)	2.17	2.00	9.39	9.00	5.15	5.00	5.15
READING BONE FERTILIZER CO., Reading, Pa.							
Reading All Crop Special 2-10-6 (8461)	2.08	2.00	10.48	10.00	*5.48	6.00	5.48
Reading All Crop Special 2-10-6 (8974)	2.19	2.00	10.15	10.00	*5.69	6.00	5.69
Reading 2-8-10 (8484)	2.20	2.00	9.33	8.00	*8.90	10.00	8.90
Reading 2-8-10 (8968)	2.02	2.00	8.24	8.00	*9.59	10.00	9.59
Reading 2-9-5 (8964)	2.17	2.00	10.20	9.00	5.03	5.00	5.03
Reading 2-9-5 (8463)	2.07	2.00	8.96	9.00	*4.43	5.00	4.48
Reading 2-12-5 (8458; 8965)	2.07	2.00	12.37	12.00	5.26	5.00	5.26
Reading 2-12-5 (9175)	2.05	2.00	12.21	12.00	*4.60	5.00	4.60
Reading 4-8-5 (8967)	4.23	4.00	8.15	8.00	4.33	5.00	4.83
Reading 4-8-5 (8462)	4.05	4.00	8.43	8.00	*4.28	5.00	4.28
Reading 4-8-8 (8460)	4.38	4.00	8.49	8.00	*7.74	8.00	7.74
Reading 4-8-8 (8970)	4.17	4.00	8.31	8.00	*7.47	8.00	7.47
Reading 5-8-5 (8465)	5.02	5.00	8.01	8.00	5.88	5.00	5.88
Reading 5-8-5 (8969)	4.81	5.00	8.47	8.00	*4.71	5.00	4.71
ROBERT A. REICHARD INC., Allentown, Pa.							
Reichard's Animal Base 1-10-5 (8439; 8981)	1.25	1.00	10.17	10.00	4.93	5.00	4.93
Reichard's Animal Base 2-8-10 (8436; 8979)	2.12	2.00	7.92	8.00	9.96	10.00	9.96
Reichard's Animal Base 2-9-5 (8437; 8977; 9099)	2.12	2.00	9.11	9.00	5.00	5.00	5.00
Reichard's Animal Base 2-12-4 (8433)	2.16	2.00	11.85	12.00	3.81	4.00	3.81
Reichard's Animal Base 2-12-4 (8980)	2.00	2.00	*11.57	12.00	4.12	4.00	4.12
Reichard's Animal Base 3-10-6 (8744)	3.07	3.00	10.05	10.00	6.19	6.00	6.19
Reichard's Animal Base 3-10-6 (8438)	3.02	3.00	*9.48	10.00	6.06	6.00	6.06
Reichard's Animal Base 3-10-6 (8978)	3.22	3.00	10.56	10.00	*5.19	6.00	5.19
Reichard's Animal Base 4-8-8 (8434; 8745; 8976)	4.14	4.00	8.02	8.00	8.31	8.00	8.31
Reichard's Animal Base 5-8-7 (8435)	5.01	5.00	9.16	8.00	7.02	7.00	7.02
Reichard's Animal Base 5-8-7 (8975)	5.01	5.00	*7.74	8.00	7.24	7.00	7.24
F. S. ROYSTER GUANO CO., Baltimore, Md.							
Royster's Arrow Potato Guano 6-6-5 (8256; 8423; 8585)	6.14	6.00	6.53	6.00	4.97	5.00	4.97
Royster's Banner Guano 2-8-10 (8066; 8132; 8222; 8362; 9033; 9216)	2.17	2.00	8.26	8.00	10.32	10.00	10.32

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
Royster's Big Bully Guano 2-9-5 (8007; 8067; 8097; 8133; 8160; 8253; 8306; 8365; 8631; 8661; 8774; 8918; 8950; 9005; 9297)	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
	2.20	2.00	9.35	9.00	5.18	5.00	5.18
Royster's Curlew Guano 3-12-6 (8257; 8726; 8772; 9096; 9123; 9294)	3.24	3.00	12.12	12.00	5.22	6.00	6.22
Royster's Curlew Guano 3-12-6 (8424)	3.58	3.00	11.95	12.00	*5.75	6.00	5.76
Royster's Fertilizer 4-16-4 (8199; 8236; 9264)	4.42	4.00	16.74	16.00	4.19	4.00	4.19
Royster's Fertilizer 4-16-10 (8235)	4.29	4.00	16.00	16.00	10.95	10.00	10.95
Royster's Fertilizer 10-16-14 (8201)	*9.57	10.00	16.14	16.00	13.85	14.00	13.85
Royster's Fonda Guano 5-10-5 (8200; 8949)	5.05	5.00	10.47	10.00	5.09	5.00	5.09
Royster's Fonda Guano 5-10-5 (8307)	5.31	5.00	10.08	10.00	*4.68	5.00	4.68
Royster's Fonda Guano 5-10-5 (8660)	*4.61	5.00	11.19	10.00	*4.46	5.00	4.46
Royster's Gem Guano 2-12-4 (8008; 8095; 8162; 8255; 8490; 8953; 9002; 9094; 9122; 9230; 9263; 9295)	2.25	2.00	12.46	12.00	4.24	4.00	4.24
Royster's Jim Dandy Guano 2-12-2 (9017; 9229)	2.24	2.00	12.28	12.00	2.31	2.00	2.31
Royster's Prize Guano 4-8-10 (8068)	4.23	4.00	8.08	8.00	10.08	10.00	10.08
Royster's Quality Trucker 4-8-7 (8009; 8070; 8096; 8131; 8161; 8254; 8308; 8632; 8776)	4.17	4.00	8.21	8.00	7.17	7.00	7.17
Royster's Quality Trucker 4-8-7 (8363)	3.90	4.00	8.33	8.00	*6.76	7.00	6.76
Royster's Surety Guano 1-10-5 (8006; 8379; 8919; 8952)	1.28	1.00	10.27	10.00	5.20	5.00	5.20
Royster's Surety Guano 1-10-5 (9016)	1.32	1.00	10.49	10.00	*4.77	5.00	4.77
Royster's Trojan Guano 4-12-4 (8129; 8309)	4.23	4.00	12.23	12.00	4.27	4.00	4.27
Royster's Trojan Guano 4-12-4 (8717)	4.25	4.00	*11.12	12.00	4.55	4.00	4.55
Royster's Truckers Delight 4-8-4 (8364; 8584; 8775)	4.20	4.00	8.37	8.00	4.12	4.00	4.12
CHARLES H. SEIBERT, Millersville, Pa.							
Grade No. 1 2-10-5 (9214)	2.01	2.00	10.69	10.00	5.87	5.00	5.87
Grade No. 2 2-8-10 (9213)	2.03	2.00	8.53	8.00	10.04	10.00	10.04
SHIPPENSBURG FERTILIZER CO., Shippensburg, Pa.							
Old Reliable Commonwealth 1-10-5 (8780)	1.02	1.00	10.12	10.00	5.33	5.00	5.33
Old Reliable Commonwealth 1-10-5 (7869)	1.02	1.00	10.60	10.00	*4.42	5.00	4.42
Old Reliable Tip Top 2-9-5 (8781)	2.09	2.00	10.15	9.00	5.02	5.00	5.02
M. L. SHOEMAKER & CO., INC., Philadelphia, Pa.							
Shoemaker's Swift Sure 2-8-10 (9323)	2.03	2.00	8.06	8.00	10.90	10.00	10.90
Shoemaker's Swift Sure 2-9-5 (8528)	2.26	2.00	9.26	9.00	4.86	5.00	4.86
Shoemaker's Swift Sure 2-9-5 (9321)	2.09	2.00	*8.65	9.00	5.18	5.00	5.18
Shoemaker's Swift Sure 2-10-4 (9322)	2.18	2.00	*9.19	10.00	4.54	4.00	4.54
THE SMITH AGRICULTURAL CHEMICAL CO., Columbus, Ohio							
Sacco 2-8-10 (8173)	2.02	2.00	8.01	8.00	11.19	10.00	11.19
Sacco 2-12-2 (8175)	2.14	2.00	11.97	12.00	2.21	2.00	2.21
Sacco 4-8-6 (8174)	4.05	4.00	7.92	8.00	6.18	6.00	6.18
SOMERSET COUNTY FERTILIZER WORKS, Somerset, Pa.							
Beaver Brand Fertilizer 1-10-5 (8499)	1.20	1.00	10.92	10.00	5.00	5.00	5.00
Beaver Brand Fertilizer 2-8-10 (8495; 9177)	2.05	2.00	8.35	8.00	10.91	10.00	10.91
Beaver Brand Fertilizer 2-9-5 (8496; 9064)	1.96	2.00	9.34	9.00	5.25	5.00	5.25
Beaver Brand Fertilizer 2-12-2 (8501)	2.30	2.00	12.13	12.00	2.26	2.00	2.26
Beaver Brand Fertilizer 2-12-6 (8502; 9063)	2.01	2.00	12.23	12.00	6.21	6.00	6.21
Beaver Brand Fertilizer 4-8-7 (8494; 8498; 8553)	4.01	4.00	8.58	8.00	7.39	7.00	7.39
Beaver Brand Fertilizer 4-8-10 (8500; 8504)	4.02	4.00	8.77	8.00	10.07	10.00	10.07
Beaver Brand Fertilizer 4-12-4 (8503)	3.83	4.00	12.44	12.00	4.11	4.00	4.11
Beaver Brand Fertilizer 5-10-5 (8505)	5.14	5.00	10.24	10.00	5.09	5.00	5.09
STANDARD WHOLESAL PHOSPHATE & ACID WORKS, INC., Baltimore, Md.							
Standard United States 1-10-5 (8863; 9152)	1.54	1.00	10.31	10.00	5.40	5.00	5.40
Standard United States 2-8-10 (8183)	2.62	2.00	8.55	8.00	*9.47	10.00	9.47
Standard United States 2-8-10 (8860)	2.68	2.00	8.98	8.00	*8.14	10.00	8.14
Standard United States 2-8-10 (9155)	2.77	2.00	9.05	8.00	*8.98	10.00	8.98
Standard United States 2-9-5 (8858; 8862)	2.37	2.00	9.10	9.00	5.59	5.00	5.59
Standard United States 2-10-5 (9153)	2.29	2.00	10.10	10.00	5.29	5.00	5.29
Standard United States 2-12-4 (9154)	2.30	2.00	12.34	12.00	4.29	4.00	4.29
Standard United States 2-12-6 (8861; 9072)	2.28	2.00	12.23	12.00	6.03	6.00	6.03
Standard United States 4-8-7 (8705)	4.26	4.00	8.80	8.00	5.87	7.00	6.87
Standard United States 5-8-5 (8704)	5.25	5.00	9.09	8.00	*4.34	5.00	4.34
SUMMERS FERTILIZER CO., INC., Baltimore, Md.							
Summers 2-8-10 Fertilizer (8267)	2.21	2.00	8.77	8.00	9.90	10.00	9.90
Summers 2-12-2 Fertilizer (8265)	*1.78	2.00	11.82	12.00	2.99	2.00	1.70
Summers 3-12-6 Fertilizer (8408)	3.16	3.00	11.85	12.00	6.14	6.00	6.14
Summers 4-8-7 Fertilizer (8268)	4.16	4.00	8.20	8.00	7.10	7.00	7.10
SWACKS FERTILIZER CO., DuBois, Pa.							
Swacks 1-10-5 (9113)	1.22	1.00	10.36	10.00	5.16	5.00	5.16
Swacks 1-10-5 (8088)	1.01	1.00	10.19	10.00	*4.65	5.00	4.65
Swacks 1-10-5 (8283)	1.11	1.00	10.52	10.00	*4.79	5.00	4.79
Swacks 1-10-5 (9012)	1.30	1.00	10.43	10.00	*4.75	5.00	4.75

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Swacks 2-8-10 (8178)	2.01	2.00	8.65	8.00	*8.88	10.00	8.88
Swacks 2-8-10 (8287)	2.08	2.00	8.35	8.00	*9.12	10.00	9.12
Swacks 2-8-10 (8999)	2.11	2.00	8.93	8.00	*9.26	10.00	9.26
Swacks 2-8-10 (9274)	2.03	2.00	8.43	8.00	*8.97	10.00	8.97
Swacks 2-9-5 (8179; 8288; 8414; 8997; 9084)	2.05	2.00	9.13	9.00	4.99	5.00	4.99
Swacks 2-9-5 (8286)	2.04	2.00	8.94	9.00	*4.50	5.00	4.50
Swacks 2-9-5 (8716)	2.06	2.00	9.65	9.00	*4.54	5.00	4.54
Swacks 2-9-5 (9275)	2.01	2.00	*8.77	9.00	5.10	5.00	5.10
Swacks 2-12-2 (8176; 8411; 9006)	2.06	2.00	12.27	12.00	2.16	2.00	2.19
Swacks 2-12-2 (9083)	1.85	2.00	*11.78	12.00	2.64	2.00	2.64
Swacks 2-12-4 (8177)	2.02	2.00	12.61	12.00	4.83	4.00	4.83
Swacks 4-8-5 (8222)	4.24	4.00	8.13	8.00	*4.24	5.00	4.24
Swacks 4-8-5 (8715)	4.19	4.00	9.22	8.00	*4.74	5.00	4.74
Swacks 4-8-7 (8086; 8284; 8413)	4.15	4.00	8.23	8.00	7.08	7.00	7.08
Swacks 4-12-4 (8084; 8412; 8777)	4.20	4.00	12.15	12.00	4.46	4.00	4.46
Swacks 5-8-7 (8085)	5.02	5.00	8.22	8.00	7.02	7.00	7.02
SWIFT & COMPANY, Baltimore, Md.							
Swift's Red Steer 1-10-5 (8469; 9043)	1.40	1.00	10.49	10.00	5.32	5.00	5.32
Swift's Red Steer 1-10-5 (8627)	1.22	1.00	10.37	10.00	*4.57	5.00	4.57
Swift's Red Steer 2-8-10 (8313; 9079; 9174)	2.14	2.00	8.26	8.00	10.27	10.00	10.27
Swift's Red Steer 2-8-10 (8226)	2.40	2.00	8.65	8.00	*9.59	10.00	9.59
Swift's Red Steer 2-8-10 (8262)	2.28	2.00	8.56	8.00	*9.74	10.00	9.74
Swift's Red Steer 2-8-10 (8471)	2.31	2.00	8.45	8.00	*9.65	10.00	9.65
Swift's Red Steer 2-8-10 (8625)	2.10	2.00	9.09	8.00	*9.78	10.00	9.78
Swift's Red Steer 2-8-10 (8667)	2.20	2.00	8.49	8.00	*9.78	10.00	9.78
Swift's Red Steer 2-8-10 (8898)	2.58	2.00	9.58	8.00	*8.54	10.00	8.54
Swift's Red Steer 2-8-10 (9135)	2.31	2.00	9.20	8.00	*9.38	10.00	9.38
Swift's Red Steer 2-8-10 (9186)	1.97	2.00	9.06	8.00	*9.48	10.00	9.48
Swift's Red Steer 2-9-5 (8225; 8249; 8314; 8418; 8472; 8586; 8626; 8668; 9040; 9163; 9187)	2.16	2.00	9.25	9.00	5.24	5.00	5.24
Swift's Red Steer 2-9-5 (7965)	2.04	2.00	9.22	9.00	*4.77	5.00	4.77
Swift's Red Steer 2-9-5 (8812)	2.09	2.00	*8.38	9.00	5.48	5.00	5.48
Swift's Red Steer 2-9-5 (8895)	2.01	2.00	*8.67	9.00	5.41	5.00	5.41
Swift's Red Steer 2-12-2 (8864; 9042)	2.20	2.00	12.45	12.00	3.19	2.00	3.19
Swift's Red Steer 2-12-4 (7964; 8559; 8724; 8985; 9041; 9080; 9161; 9259)	2.18	2.00	12.23	12.00	4.26	4.00	4.26
Swift's Red Steer 2-12-4 (8143)	2.77	2.00	*11.79	12.00	4.45	4.00	4.45
Swift's Red Steer 2-12-4 (8248)	2.01	2.00	*11.58	12.00	4.08	4.00	4.08
Swift's Red Steer 2-12-4 (8813)	2.08	2.00	*11.47	12.00	4.14	4.00	4.14
Swift's Red Steer 3-12-6 (8480)	3.27	3.00	12.40	12.00	6.42	6.00	6.42
Swift's Red Steer 3-12-6 (8897)	3.29	3.00	11.93	12.00	*5.63	6.00	5.63
Swift's Red Steer 4-8-4 (8740)	4.00	4.00	8.02	8.00	4.00	4.00	4.00
Swift's Red Steer 4-8-7 (7966; 8144; 8224; 8312; 8415; 8470; 8544; 8666)	3.97	4.00	8.24	8.00	7.03	7.00	7.03
Swift's Red Steer 4-8-7 (8263)	3.89	4.00	8.15	8.00	*6.41	7.00	6.41
Swift's Red Steer 4-8-7 (8641)	4.01	4.00	8.62	8.00	*6.71	7.00	6.71
Swift's Red Steer 4-8-7 (8723)	4.10	4.00	8.70	8.00	*6.63	7.00	6.63
Swift's Red Steer 4-8-7 (8896)	4.12	4.00	*7.42	8.00	7.06	7.00	7.06
Swift's Red Steer 4-12-4 (8416; 8642; 9031; 9257)	4.23	4.00	12.94	12.00	4.36	4.00	4.36
Swift's Red Steer 4-12-4 (8543)	4.17	4.00	12.47	12.00	*3.71	4.00	3.71
Swift's Red Steer 4-16-4 (8325)	4.02	4.00	*13.15	15.00	5.08	4.00	5.08
Swift's Red Steer 5-8-5 (8145; 8545)	4.84	5.00	8.14	8.00	4.94	5.00	4.94
Swift's Red Steer 8-24-8 (8741)	8.58	8.00	*22.49	24.00	9.44	8.00	9.44
Vigore (7831; 8037; 8146)	4.23	4.00	12.51	12.00	4.49	4.00	4.49
I. P. THOMAS & SON CO., Philadelphia, Pa.							
Farmers Choice 2-12-4 (9235)	2.27	2.00	13.09	12.00	4.11	4.00	4.11
Special Potato 2-8-10 (8273)	2.29	2.00	8.84	8.00	10.16	10.00	10.16
Thomas 3-10-10 (9233)	3.29	3.00	10.64	10.00	*9.64	10.00	9.64
Thomas 4-8-7 (8272)	4.28	4.00	8.87	8.00	7.24	7.00	7.24
Thomas Special 5-6-5 (8274)	4.83	5.00	8.90	8.00	5.82	5.00	5.82
Tip Top Fertilizer 3-10-6 (9232)	3.01	3.00	10.58	10.00	6.59	6.00	6.59
Victor Potash Fertilizer 2-9-5 (7989; 8276; 9234)	2.50	2.00	9.81	9.00	5.43	5.00	5.43
F. W. TUNNELL & CO., INC., Philadelphia, Pa.							
Potato and Truck Manure 2-8-10 (8443; 8878; 9104)	2.15	2.00	8.75	8.00	10.42	10.00	10.42
Premier Potato Manure 4-8-7 (8637; 8880; 9314)	4.27	4.00	8.37	8.00	7.41	7.00	7.41
Premier Potato Manure 4-8-7 (8444)	*3.29	4.00	8.82	8.00	7.00	7.00	7.00
Standard Cereal Manure 2-12-4 (8877)	2.28	2.00	12.20	12.00	4.44	4.00	4.44
Veribest Cereal Manure 2-8-6 (8445; 9313)	2.15	2.00	8.95	8.00	6.34	6.00	6.34
Veribest Cereal Manure 2-8-6 (8879)	2.19	2.00	9.06	8.00	*5.60	6.00	5.60
Wheat and Cereal Manure 1-10-5 (8638)	1.17	1.00	11.15	10.00	5.16	5.00	5.16
VAN HORNE CHEMICAL CO., Jersey City, N. J.							
Van Horne's Lawn and Garden Grower (8135)	4.81	5.00	9.43	8.00	5.45	5.00	5.45
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md.							
V-C Double Owl Brand 4-8-7 (7970; 8128; 8486; 8609; 8687; 9270)	4.04	4.00	8.14	8.00	7.22	7.00	7.22
V-C Double Owl Brand 4-8-7 (8751)	4.01	4.00	*7.80	8.00	7.64	7.00	7.64
V-C Fish and Potash Compound 2-9-5 (7969; 8127; 8315; 8688; 8874; 9024; 9053; 9226; 9271)	2.20	2.00	9.56	9.00	5.11	5.00	5.11
V-C Great Truck and Vegetable Compound 4-8-5 (8400)	4.26	4.00	8.28	8.00	5.30	5.00	5.30
V-C Indian Brand Fertilizer 2-8-10 (8752; 9052; 9100; 8875)	2.04	2.00	8.35	8.00	10.48	10.00	10.48

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
V-C Owl Brand Fertilizer 2-12-4 (8317; 9030; 9054)	2.14	2.00	12.31	12.00	4.39	4.00	4.39
V-C Flow Brand Fertilizer 4-12-4 (8318; 9149)	4.13	4.00	12.54	12.00	4.00	4.00	4.00
V-C Star Brand Fertilizer 1-10-6 (8484; 9227)	1.21	1.00	10.25	10.00	5.26	5.00	5.26
V-C Super 24 Fertilizer 4-16-4 (8140; 8316)	4.14	4.00	16.20	16.00	4.51	4.00	4.51
V-C Super 24 Fertilizer 4-16-4 (8685)	*3.67	4.00	16.78	16.00	4.17	4.00	4.17
V-C Virginia Tracker 5-8-5 (8516)	5.20	6.00	8.69	8.00	5.15	5.00	5.15
YORK CHEMICAL WORKS, York, Pa.							
Dempwolf's General Crop 3-10-4 (7845; 8188; 8230; 8805)	3.02	3.00	10.27	10.00	4.62	4.00	4.62
Dempwolf's Grain Special 2-12-2 (7838; 8483; 8673)	2.14	2.00	12.39	12.00	2.18	2.00	2.18
Dempwolf's Grain Special 2-12-2 (8796)	2.26	2.00	*11.77	12.00	2.42	2.00	2.42
Dempwolf's High Test 8-16-14 (7848)	7.81	8.00	*14.84	16.00	15.71	14.00	15.71
Dempwolf's Potato and Truck 5-8-7 (7836; 8227; 8482; 8600; 8806)	4.98	5.00	8.53	8.00	7.14	7.00	----
Dempwolf's Spring Special 2-8-10 (7837; 7846; 8017; 8300; 8794)	2.15	2.00	8.32	8.00	10.47	10.00	10.47
Dempwolf's Standard 2-9-5 (8302; 8640; 8797)	2.08	2.00	9.25	9.00	6.33	5.00	5.33
Dempwolf's Standard 2-9-6 (7836)	2.08	2.00	*8.56	9.00	5.72	6.00	5.72
Dempwolf's Standard 2-9-5 (8951)	2.01	2.00	*8.47	9.00	5.54	6.00	6.54
Dempwolf's Standard Potash 1-10-5 (7843; 8803; 8935)	1.26	1.00	10.35	10.00	4.99	6.00	4.99
Dempwolf's Top Dresser 6-6-6 (8014; 8749; 8789)	6.17	6.00	6.23	6.00	5.22	5.00	5.22
Dempwolf's Top Dresser 6-6-5 (7851)	6.16	6.00	6.18	6.00	*4.56	5.00	4.56
Dempwolf's 2-12-4 (7834; 8795)	2.20	2.00	12.51	12.00	4.20	4.00	4.20
Dempwolf's 2-12-4 (8301)	2.10	2.00	*11.63	12.00	5.31	4.00	5.31
Dempwolf's 4-8-7 (7839; 8016; 8189; 8228; 8599; 8639; 8790)	4.11	4.00	8.22	8.00	7.39	7.00	7.39
Dempwolf's 4-12-4 (7850; 8015; 8875)	4.06	4.00	12.30	12.00	4.20	4.00	4.20
Dempwolf's 4-16-10 (7847)	3.92	4.00	*16.66	16.00	11.41	10.00	11.41
Dempwolf's 4-16-10 (8788)	4.04	4.00	*16.78	16.00	10.72	10.00	10.72
Dempwolf's 3-5-12 For Tobacco (7844; 8804)	3.12	3.00	5.35	5.00	13.46	12.00	----
Average	2.94	-----	10.10	-----	6.08	-----	-----

\*Deficient

TABLE IV. GROUND BONE FERTILIZERS—FURNISHING NITROGEN AND PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	NITROGEN		PHOSPHORIC ACID	
	Found	Guar.	Found	Guar.
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N.Y.	P. ct.	P. ct.	P. ct.	P. ct.
Fine Ground Bone (8101; 8214; 8376; 9217; 9284)	2.81	2.47	24.48	23.00
Fine Ground Bone (8170)	4.24	2.47	*22.16	23.00
Pure Raw Bone Meal (8030; 8421; 8649)	3.98	3.70	23.31	20.00
ARMOUR FERTILIZER WORKS, Baltimore, Md.				
Armour's Bone Meal (8036; 8241; 8355; 8454; 8696)	2.89	2.47	24.47	23.00
Armour's Raw Bone Meal (8242; 8455; 8644)	4.29	3.70	22.35	20.00
ASSOCIATED CHEMICAL CO., Baltimore, Md.				
Associated Fine Bone Meal (8073; 8194; 8570; 8654; 8679; 9293)	2.93	2.47	23.97	23.00
Associated Pure Raw Bone (7881; 8072; 8571; 8604)	4.32	3.70	21.60	20.00
BAUGH & SONS CO., Baltimore, Md.				
Baugh's Pure Steamed Bone Meal (8000; 9071)	2.90	2.47	24.67	23.00
Baugh's Raw Bone Meal (7878; 8893)	4.07	3.70	21.97	21.60
GRIFFITH & BOYD CO., Baltimore, Md.				
Pure Fine Ground Bone Meal 3.70-20 (8657)	4.17	3.70	21.76	20.00
HAFLEIGH & CO., Buchanan, Va.				
Pure Raw Bone Meal (9288)	4.03	3.00	27.18	22.00
G. OBER & SONS CO., Baltimore, Md.				
Refined Bone Meal (8053; 8574)	4.24	2.47	22.58	22.00
Refined Ground Bone (8054)	4.43	3.70	21.24	21.00
READING BONE FERTILIZER CO., Reading, Pa.				
Pure Raw Bone (8466; 8973)	4.27	3.70	22.31	18.00
ROBERT A. REICHARD, INC., Allentown, Pa.				
Reichard's Raw Bone Meal 3.7-20 (8984)	3.61	3.70	*18.79	20.00
Reichard's Raw Bone Meal 3.7-20 (9092)	4.27	3.70	23.11	20.00
P. S. ROYSTER GUANO CO., Baltimore, Md.				
Royster's Fine Ground Bone Meal (8258; 8718)	3.37	2.47	23.63	22.90
Royster's Raw Bone Meal (8202)	4.36	3.70	20.97	20.60
Royster's Raw Bone Meal (9231)	4.27	3.70	*20.15	20.60
SWACKS FERTILIZER CO., DuBois, Pa.				
Bone Meal (8598)	2.67	2.47	25.95	23.00
SWIFT & COMPANY, Baltimore, Md.				
Bone Meal (8328; 8742)	2.94	2.47	26.19	23.00
Raw Bone Meal Fertilizer (8583)	4.26	3.70	22.88	20.00
Raw Bone Meal Fertilizer (8587)	*3.10	3.70	25.98	20.00
VAN HORNE CHEMICAL CO., Jersey City, N. J.				
Van Horne's Ground Bone (7832)	2.94	2.40	24.36	22.75
YORK CHEMICAL WORKS, York, Pa.				
Pure Ground Bone (7849; 8191; 8747; 8901)	2.75	2.46	24.38	23.00
Average	3.50	-----	23.46	-----

\*Deficient

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID	
	Available	
	Found	Guar.
<b>SUPERPHOSPHATE FERTILIZERS</b>	P. ct.	P. ct.
ACME GUANO CO., Baltimore, Md. Acme 16% Superphosphate (9307)	16.96	16.00
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. AA 16% Superphosphate (7979; 8029; 8062; 8074; 8110; 8168; 8344; 8564; 8650; 8991; 9077; 9119; 9164; 9285)	16.54	16.00
AA 20% Superphosphate (8343; 8565; 8651; 8721; 8990; 9145; 9247; 9286)	20.53	20.00
Bowker's 16% Superphosphate (8621)	17.06	16.00
ARMOUR FERTILIZER WORKS, Baltimore, Md. Big Crop 16% Superphosphate (7973; 8032; 8152; 8354; 8404; 8558; 8699; 8729; 8943; 9058; 9087; 9131; 9248)	16.46	16.00
Big Crop 20% Superphosphate (8246; 8294; 8374; 8425; 8698; 8771; 9086; 9223; 9249)	20.39	20.00
BALTIMORE FERTILIZER CO., Baltimore, Md. Honest 16% Superphosphate (7875; 8785)	16.47	16.00
BAUGH & SONS CO., Baltimore, Md. Baughphos The Ideal 16% Superphosphate (7876; 7994; 8046; 8093; 8116; 8232; 8252; 8355; 8393; 8554; 8819; 8888; 8927; 9070; 9109; 9184; 9215; 9261; 9304)	16.91	16.00
Baughphos The Ideal 18% Superphosphate (8299)	19.46	18.00
Baughphos The Ideal 20% Superphosphate (8045; 8114; 8186; 8522; 8555; 9069; 9183; 9262)	20.87	20.00
CARLISLE FERTILIZER WORKS, Carlisle, Pa. Honest 16% Superphosphate (7866)	16.54	16.00
CENTRAL CHEMICAL CO., INC., Baltimore, Md. Gre-All Dissolved Phosphate 16% (7851; 8047; 8104; 8333; 8708; 8787; 9021; 9132; 9160; 9190; 9252)	16.74	16.00
COOPERATIVE G.L.F. MILLS INC., Buffalo, N.Y. G.L.F. Quality 16% Superphosphate (8150; 8155; 8211; 8589; 8594; 8962)	17.19	16.00
EASTERN STATES FARMERS EXCHANGE, Springfield, Mass. Eastern States 16% Superphosphate (8391)	17.08	16.00
AMOS EBY & COMPANY, Leaman Place, Pa. Eby 16% Superphosphate (7922)	16.21	16.00
FARMERS FERTILIZER & FEED CO., Westminster, Md. Superphosphate 16% (7987)	16.14	16.00
FARMERS FERTILIZER WORKS, Elizabethtown, Pa. Acid Phosphate 16% (7894; 8223; 8940)	16.57	16.00
GRIFFITH & BOYD CO., Baltimore, Md. High Grade 16% Acid Phosphate (7982; 8207; 8281; 8761; 8870; 8938; 9261)	17.29	16.00
20% Acid Phosphate (8206; 8282; 9011)	20.52	20.00
HUBBARD FERTILIZER CO., Baltimore, Md. Hubbard's 16% Superphosphate (8195; 8432; 8478; 8538; 8611; 8678; 9026; 9108; 9254)	16.54	16.00
Hubbard's 20% Superphosphate (8196; 8612; 9028; 9253)	20.43	20.00
INDEPENDENT MANUFACTURING CO., Philadelphia, Pa. Independent's 16% Superphosphate (9103)	17.33	16.00
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N. Y. International 16% Superphosphate (8123; 8323; 8682)	16.32	16.00
KEYSTONE ORANGE EXCHANGE, Harrisburg, Pa. Oranger's 16% Superphosphate (8239)	16.86	16.00
Oranger's 20% Superphosphate (8240; 8346)	20.97	20.00
KLINE GRAIN COMPANY, Shelocta, Pa. Kline's 16% Acid Phosphate (8733)	15.94	16.00
KOLLER FERTILIZER CO., Olen Rock, Pa. Koller's High Grade Superphosphate 16% (7854; 8393; 8810)	16.59	16.00
LANCASTER BONE FERTILIZER CO., INC., Quarryville, Pa. Conestoga Brand Superphosphate 16% (7914; 8385; 8845)	16.48	16.00
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's Superphosphate 16% (7925)	16.64	16.00
Levan's Superphosphate 20% (7932)	20.65	20.00
FRED E. LORD, Espy, Pa. Lord's Superphosphate 16% (8917)	16.63	16.00

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID	
	Available	
	Found P. ct.	Guar. P. ct.
FREDERICK MEHRING FERTILIZER WORKS, Keymar, Md. Superphosphate 16% (7995)	16.20	16.00
MILLER FERTILIZER CO., Baltimore, Md. Miller's 16% Superphosphate (7882; 8019; 8536; 8766; 8854; 8941; 9060; 9146; 9204)	16.49	16.00
Miller's 20% Superphosphate (9045; 9180)	20.63	20.00
G. OBER & SONS COMPANY, Baltimore, Md. Extra Grade Superphosphate 20% (8833)	20.00	20.00
High Grade Superphosphate 16% (7899; 8573)	16.25	16.00
Special Grade Superphosphate 18% (7901; 8834)	18.24	18.00
PIEDMONT MT. AIRY GUANO CO., INC., Baltimore, Md. Piedmont Superphosphate 16% (8487)	16.79	16.00
READING BONE FERTILIZER CO., Reading, Pa. 16% Clear Acid Phosphate (8459; 8971)	16.63	16.00
ROBERT A. REICHARD INC., Allentown, Pa. Reichard's Famous 16% Acid Phosphate (8441; 8983; 9091)	16.91	16.00
P. S. ROYSTER GUANO CO., Baltimore, Md. Royster's Superphosphate 16% (8069; 8099; 8130; 8159; 8305; 8360; 8630; 8663; 8921; 8954; 9003; 9120; 9296)	16.71	16.00
Royster's Superphosphate 20% (7971; 8158; 8237; 8361; 8682; 8773; 9004; 9138; 9265)	20.69	20.00
SHIPPENSBURG FERTILIZER CO., Shippensburg, Pa. Old Reliable 16% (7867; 8779)	16.01	16.00
SMITH AGRICULTURAL CHEMICAL CO., Columbus, Ohio Sacco 16% Superphosphate (8172)	16.08	16.00
Sacco 20% Superphosphate (8171)	20.06	20.00
SOMERSET COUNTY FERTILIZER WORKS, Somerset, Pa. Beaver Brand Fertilizer 16% (8497; 9061)	16.85	16.00
Beaver Brand Fertilizer 20% (9066)	20.49	20.00
STANDARD WHOLESAL PHOSPHATE & ACID WORKS, INC., Baltimore, Md. Standard U. S. 16% Superphosphate (9157)	16.06	16.00
Standard U. S. 20% Superphosphate (8184; 9156)	20.46	20.00
SUMMERS FERTILIZER CO., INC., Baltimore, Md. Summer's 16% Superphosphate (8409)	16.92	16.00
SWACKS FERTILIZER CO., DuBois, Pa. Swacks' 16% Superphosphate (8087; 8285; 8410; 8998; 9078; 9111)	17.43	16.00
Swacks' 20% Superphosphate (9112)	21.44	20.00
SWIFT & COMPANY, Baltimore, Md. Swift's Red Steer Superphosphate 16% (8041; 8142; 8223; 8265; 8417; 8473; 8546; 8624; 8643; 8665; 8722; 9039; 9162; 9258)	16.45	16.00
Swift's Red Steer Superphosphate 20% (8547; 9082; 9185; 9260)	20.53	20.00
I. P. THOMAS & SON CO., Philadelphia, Pa. I.P. Thomas 16% Superphosphate (8275)	18.11	16.00
20% Superphosphate (9106)	20.11	20.00
P. W. TUNNELL & CO., INC., Philadelphia, Pa. 16% Superphosphate (9105; 9315)	17.61	16.00
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md. V-C 16% Superphosphate (7972; 8126; 8320; 8401; 8485; 8684; 9031; 9055; 9269)	16.77	16.00
V-C 20% Superphosphate (8319; 8686; 9052; 9136)	21.63	20.00
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Superphosphate 16% (7840; 8190; 8304; 8674; 8748)	17.20	16.00
Dempwolf's Superphosphate 16% (8799)	*14.44	16.00
Dempwolf's Superphosphate 20% (7841; 8303; 8798)	20.36	20.00
Average	17.76	-----
<u>LIME PHOSPHATE FERTILIZERS</u>		
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. AA Basic Lime Phosphate 16% (7978; 8005; 8510; 8869; 8933; 8946; 9165)	16.83	16.00
THE BAUGH & SONS CO., Baltimore, Md. Baugh's Lime and Phosphate (7879; 8529)	16.23	16.00
CENTRAL CHEMICAL CO., Baltimore, Md. Gro-All Carbo Lime Phosphate 16% (7943; 9195)	16.66	16.00
*Deficient		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID	
	Available	
	Found	Guar.
	P. ct.	P. ct.
GRIFFITH & BOYD CO., Baltimore, Md. Lime Phosphate 16% (8636)	16.73	16.00
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's Lime Phosphate 16% (7931)	16.48	16.00
MILLER FERTILIZER CO., Baltimore, Md. Miller's Lime and Phosphate (8381; 8876)	16.54	16.00
P. S. ROYSTER GUANO CO., Baltimore, Md. Royster's Lime Phosphate (8920)	16.64	16.00
STANDARD WHOLESALE PHOSPHATE & ACID WORKS, INC., Baltimore, Md. 16% Lime Phosphate (8859)	15.95	16.00
SUMMERS FERTILIZER CO., INC., Baltimore, Md. Summers' 16% Lime Phosphate (8269)	16.84	16.00
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md. V-C 16% Phosphate and Lime Mixture (9125)	16.80	16.00
Average	16.64	----

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ACME GUANO CO., Baltimore, Md. Acme Corn and Grain 0-12-5 Fertilizer (9238)	12.06	12.00	5.53	5.00	5.53
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y.					
AA Victory Mixture 0-12-5 (8111; 8342; 8814; 8924; 9019; 9075; 9098; 9114; 9168)	12.63	12.00	5.14	5.00	5.14
AA Victory Mixture 0-12-5 (7986)	12.12	12.00	*4.73	5.00	4.73
AA Victory Mixture 0-12-5 (8738)	12.66	12.00	*4.70	5.00	4.70
AA XXX Mixture 0-10-10 (8102; 8511)	10.33	10.00	10.31	10.00	10.31
ARMOUR FERTILIZER WORKS, Baltimore, Md. Big Crop 0-12-5 Fertilizer (8293; 8481; 8727; 9095)	12.33	12.00	5.06	5.00	5.06
BALTIMORE FERTILIZER CO., Baltimore, Md.					
Honest 0-12-5 (8782)	13.34	12.00	5.07	5.00	5.07
Honest 0-12-5 (7864)	*11.71	12.00	5.23	5.00	5.23
Honest 0-12-5 (7874)	12.37	12.00	*4.82	5.00	4.82
BAUGH & SONS CO., Baltimore, Md.					
Baugh's Phosphate and Potash Mixture 0-10-10 (8295)	11.01	10.00	*9.54	10.00	9.54
Baugh's Phosphate and Potash Mixture 0-12-5 (7877; 8296; 8397; 8508; 8934; 8958; 9170)	12.20	12.00	5.27	5.00	5.27
CENTRAL CHEMICAL CO., Baltimore, Md.					
Gro-All Potash Special 0-12-5 (7945; 8513; 8709; 9001; 9159; 9198)	12.54	12.00	5.27	5.00	5.27
Gro-All Potash Special 0-12-5 (8580)	*11.67	12.00	8.18	5.00	8.18
AMOS EBY & CO., Leaman Place, Pa. Eby Farmers Mixture 12-5 (7921)	12.37	12.00	5.34	5.00	5.34
FARMERS FERTILIZER WORKS, Elizabethtown, Pa.					
Farmers Phosphate and Potash 12-5 (7893; 9239)	12.00	12.00	8.05	5.00	5.05
Farmers Phosphate and Potash 12-5 (8827)	12.37	12.00	*4.63	5.00	4.63
FOLLMER BROTHERS, Benton, Pa. Follmer Brothers 0-12-5 (8922)	12.47	12.00	4.88	8.00	4.88
GRIFFITH & BOYD CO., Baltimore, Md. Special Grain Grower 0-12-5 (8204; 9009)	12.02	12.00	5.31	5.00	5.31
HUBBARD FERTILIZER CO., Baltimore, Md. Hubbard's 0-12-5 Alkaline (9027)	12.50	12.00	5.04	5.00	5.04
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N. Y.					
Super and Potash 0-12-5 (8321)	12.65	12.00	5.28	5.00	5.28
Super and Potash 0-12-5 (9128)	*11.09	12.00	5.30	5.00	5.30
LANCASTER BONE FERTILIZER CO., INC., Quarryville, Pa.					
Conestoga 12-5 (7910)	12.07	12.00	5.10	5.00	5.10
Conestoga 12-5 (8844)	12.73	12.00	*4.10	5.00	4.10
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's 0-12-5 (7950)	12.93	12.00	4.87	5.00	4.87
FRED E. LORD, Espy, Pa. Lord's 0-12-5 Fertilizer (8913)	12.42	12.00	5.61	5.00	5.61
MILLER FERTILIZER CO., Baltimore, Md.					
Miller's 0-10-10 Fertilizer (9278)	10.33	10.00	10.08	10.00	10.08
Miller's 0-10-10 Fertilizer (8955)	10.97	10.00	*9.73	10.00	9.73
Miller's 12-5 Fertilizer (7886; 9205)	12.87	12.00	4.93	5.00	4.93
Miller's 12-5 Fertilizer (8948)	12.70	12.00	*4.50	5.00	4.50
O. OBER & SONS CO., Baltimore, Md.					
12-5 Potash Compound (7905)	12.34	12.00	4.89	5.00	4.89
12-5 Potash Compound (8835)	*10.83	12.00	5.00	5.00	5.00
READING BONE FERTILIZER CO., Reading, Pa. High Grade Potash Mixture (8966)	12.08	12.00	8.18	8.00	8.15
ROBERT A. REICHARD INC., Allentown, Pa.					
Reichard's Famous 12-5 (8440)	12.69	12.00	8.06	5.00	5.06
Reichard's Famous 12-5 (8982)	*11.73	12.00	5.78	5.00	5.78
F. S. ROYSTER GUANO CO., Baltimore, Md.					
Royster's Phosphate and Potash 12-10 (9097)	10.29	10.00	10.09	10.00	10.09
Royster's Phosphate and Potash 12-5 (8380; 8633; 9018; 9121)	12.44	12.00	5.08	8.00	5.08
SHIPPENSBURG FERTILIZER CO., Shippensburg, Pa.					
Old Reliable Valley Special 0-12-5 (7868)	12.17	12.00	*4.73	5.00	4.73
Old Reliable Valley Special 0-12-5 (8778)	12.57	12.00	*4.46	5.00	4.46
STANDARD WHOLESALE PHOSPHATE & ACID WORKS, INC., Baltimore, Md.					
Standard United States 0-12-5 (8864)	12.08	12.00	8.20	5.00	8.20
SUMMERS FERTILIZER CO., INC., Baltimore, Md.					
Summers 0-12-5 (8277)	*11.37	12.00	5.57	5.00	5.57
SWACKS FERTILIZER CO., DuBois, Pa. Swacks 0-12-5 (8289)	13.21	12.00	5.87	5.00	5.87

\*Deficient

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
SWIFT & COMPANY, Cleveland, Ohio Swift's Red Steer 0-10-10 (9188)	10.36	10.00	10.00	10.00	10.00
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md. V-C High Grade Potash Mixture (9023; 9124; 9228)	12.24	12.00	5.19	5.00	5.19
YORK CHEMICAL WORKS, York, Pa. Dempwolf's 12-5 (7842; 8018; 8800)	12.51	12.00	5.12	5.00	5.12
Average	12.18	-----	5.55	-----	-----

TABLE VII. MISCELLANEOUS FERTILIZERS

MANUFACTURER AND BRAND NAME	NITROGEN		PHOSPHORIC ACID						POTASH	
	Found	Guar.	Total	Available		Insoluble		Found	Guar.	As Muriate P. ct.
				Found	P. ct.	Found	P. ct.			
NITRATE OF SODA  THE BARRETT COMPANY, New York, N. Y. Arcadian Nitrate of Soda (7935; 7942; 8048; 8203; 8215; 8250; 8514; 8707; 8972)  CHILEAN NITRATE SALES CORPORATION, New York, N. Y. Champion Brand Chilean Nitrate of Soda (7897; 8023; 8083; 8219; 8475; 8791; 8829)  Standard Chilean Nitrate of Soda (8001)  Average	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
	16.21	16.00	-----	-----	-----	-----	-----	-----	-----	-----
	16.13	16.00	-----	-----	-----	-----	-----	-----	-----	-----
	15.82	15.25	-----	-----	-----	-----	-----	-----	-----	-----
	16.15	-----	-----	-----	-----	-----	-----	-----	-----	-----
SULPHATE OF AMMONIA  THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. Sulphate of Ammonia (7941)  ARMOUR FERTILIZER WORKS, Baltimore, Md. Sulphate of Ammonia (8457)  ASSOCIATED CHEMICAL CO., Baltimore, Md. Associated Sulphate of Ammonia (8051; 8569)  BAUGH & SONS CO., Baltimore, Md. Sulphate of Ammonia (8519)  KEYSTONE GRADE EXCHANGE, Harrisburg, Pa. Oranger's Sulphate of Ammonia (8349)  LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's Sulphate of Ammonia (7936)  SWIFT & COMPANY, Baltimore, Md. Sulphate of Ammonia (8327; 8726)  YORK CHEMICAL WORKS, York, Pa. Sulphate of Ammonia (7862; 8793)  Average	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
	21.14	20.56	-----	-----	-----	-----	-----	-----	-----	-----
	20.96	20.50	-----	-----	-----	-----	-----	-----	-----	-----
	21.07	20.50	-----	-----	-----	-----	-----	-----	-----	-----
	21.08	20.57	-----	-----	-----	-----	-----	-----	-----	-----
	20.96	20.00	-----	-----	-----	-----	-----	-----	-----	-----
	21.00	20.56	-----	-----	-----	-----	-----	-----	-----	-----
	21.17	20.56	-----	-----	-----	-----	-----	-----	-----	-----
	20.83	20.50	-----	-----	-----	-----	-----	-----	-----	-----
	21.03	-----	-----	-----	-----	-----	-----	-----	-----	-----
TANKAGE  ASSOCIATED CHEMICAL CO., Baltimore, Md. Associated Animal Tankage 7% (7860)  BAUGH & SONS CO., Philadelphia, Pa. Baugh's High Grade Ground Tankage 6% (8572)  SHAFFER STORES CO., Tyrone, Pa. Penn Alto Brand Tankage (8345)  UNITED HOME DRESSED MEAT CO., Altoona, Pa. Dry Tankage (8336)  *Deficient	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
	6.47	7.00	11.14	4.50	-----	-----	-----	-----	-----	-----
	6.28	6.00	9.52	8.00	-----	-----	-----	-----	-----	-----
	4.81	5.00	20.29	18.00	-----	-----	-----	-----	-----	-----
	6.27	5.00	15.47	12.00	-----	-----	-----	-----	-----	-----

TABLE VII. MISCELLANEOUS FERTILIZERS

MANUFACTURER AND BRAND NAME	NITROGEN				PHOSPHORIC ACID				POTASH			
	Found		Guar.		Available		Insoluble		Found		Guar.	
	P. ct.	P. ct.	P. ct.	P. ct.	Found	P. ct.	Found	P. ct.	P. ct.	P. ct.	P. ct.	As Muriate P. ct.
F. L. WINNER, Lock Haven, Pa. Winner's Tankage (8986)	5.69	6.50	17.03	12.00	---	---	---	---	---	---	---	---
Winner's Tankage (8516)	6.26	6.50	16.16	12.00	---	---	---	---	---	---	---	---
Average	5.80	---	14.94	---	---	---	---	---	---	---	---	---
<u>KALINIT</u> BROUGH & SONS CO., Baltimore, Md. Genuine Imported Kalpit* (8520)	---	---	---	---	---	---	---	---	14.77	14.00	---	14.77
<u>MURIATE OF POTASH</u> THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. Muriate of Potash (8079; 8738)	---	---	---	---	---	---	---	---	49.10	48.00	---	49.10
N. V. POTASH EXPORT MY, INC., New York, N. Y. Muriate of Potash (8208; 8229; 8474; 8568; 8608; 8792; 9272)	---	---	---	---	---	---	---	---	50.60	48.00	---	50.60
SWIFT & COMPANY, Baltimore, Md. Muriate of Potash (8325)	---	---	---	---	---	---	---	---	53.52	48.00	---	53.52
Average	---	---	---	---	---	---	---	---	50.59	---	---	---
<u>MISCELLANEOUS</u> AMERICAN CYANAMID CO., New York, N. Y. Aero Cyanamid (7999; 8046)	22.04	22.00	---	---	---	---	---	---	---	---	---	---
*Deficient												